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FINANCIAL TIMES

No. 25,546 Thursday September 2 1971 ** 6p

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News Summary

Sadat to head Arab union
President Anwar Sadat of Egypt is expected to head the new Arab League union, which will be the first step after the announcement of the results of the referendum on the federation of the Arab Republics.
About 12m. voters in the three countries went to the polls yesterday to vote on the union. In Syria, the vote was a landslide for the union, with 95 per cent. of the vote. In Iraq, the vote was also a landslide, with 95 per cent. of the vote. In Egypt, the vote was a landslide, with 95 per cent. of the vote.

Sewell: second woman charged

A second woman, Mrs. Barbara Palmer, of Uppington, was charged in connection with the escape of Britain's most wanted man, Frederick Joseph Sewell. Mrs. Palmer was charged with aiding and abetting the escape of Sewell, who is wanted in connection with the killing of a Blackpool police chief.

Flying plane in hotel death

Mrs. Sarah Kilmartin, 39, who spent five months in prison, was repeatedly flying between New York and Amsterdam with her 14-year-old grandson, Mitchell. She was charged with the death of her grandson, who died of a heart attack at a hotel near Schiphol airport.

Lady Fleming arrested

Four persons, including Lady Fleming, wife of the late Sir Alexander Fleming, were arrested in Athens on Tuesday. They were charged with the murder of a Greek politician, who was killed in a car crash.

Death ferry investigated

Stratford's deputy police prosecutor, who was aboard the Greek ferry Helios, in which at least 24 died on Saturday, is to clarify whether any passengers died and failed to disembark and how the ferry was handled.

Agreed GUS offer for A. & S. Henry

A GREAT UNIVERSAL STORES last night announced a bid for the 75 per cent. of A. & S. Henry which GUS and its subsidiaries own. The bid was for £10m. and was subject to a number of conditions.

People and places

A soldier was killed and two others badly injured when an army Sioux helicopter crashed on a road near Andover, Hampshire. The helicopter was carrying a medical team.

People and places

A woman was killed and two others badly injured when a car crashed into a wall near Andover, Hampshire. The car was carrying a family of four.

People and places

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Heath and Lynch in two-day talks at Chequers next week

BY PHILIP RAWSTORNE

Mr. Heath yesterday took the first step towards a new political initiative to solve the Ulster crisis by inviting Mr. Jack Lynch, the Irish Prime Minister, to visit Chequers for two days next Monday and Tuesday.
The meeting is intended to promote a better understanding of the constitutional position of Northern Ireland, neither West nor East. Mr. Lynch will stay the night there and both Sir Alec Douglas-Home, the Foreign Secretary, and Mr. Reginald Maudling, the Home Secretary, are likely to take part in the discussion on Tuesday.
The agenda will also include economic questions and such outstanding subjects in the EEC negotiations as fisheries.
But Northern Ireland—and Mr. Heath's desire to find a basis for co-operation between Britain and the Irish Republic, in securing a long-term solution to its problems—will dominate the talks.

Reforms

It is hoped by then that the security situation in Ulster and a closer accord between the two governments will make further reforms to the machinery of government in Ulster possible.
Mr. Brian Faulkner, the Northern Ireland Premier, who has been fully consulted about the Chequers meeting, could then be brought into a discussion of such proposals as his own suggestion for all-party Parliamentary committees and other possible changes such as proportional representation.
It was emphasised in Whitehall yesterday that, though the British Government was not pre-

Activities

Mr. Heath, it is said, intends to seek a better understanding between the two governments rather than to play Mr. Lynch with a series of ultimatums, though it would be surprising if he did not press the Irish Prime Minister to clamp down on the IRA's activities.
It will be Mr. Lynch's first visit to London since 1968 though he met Mr. Heath in New York last October.
Mr. Heath, who lunched at Chequers yesterday with Mr. Maudling, returned to Downing Street last night to prepare for today's Cabinet and other Ministerial meetings.

BAC overtime ban could hit Concorde programme

BY MICHAEL HAND, LABOUR CORRESPONDENT

BRITISH Aircraft Corporation, which is affected in Hurn, near Birmingham, yesterday reacted against the company's plan to impose a further 1,200 employees from five plants by imposing an overtime ban which could cause delays in the Concorde flight programme.
A BAC spokesman said it was too early to say how work would be affected by the ban, but he pointed out that only a limited amount of overtime was being worked at present.
It was reported later that BAC workers at Weybridge would also have overtime unless the company agreed to save some of the threatened jobs there.

Suggestions

More than 2,000 production and white-collar workers walked out of the factory for the meeting yesterday by Hurn. The total hire-purchase and credit business in all types of vehicles last month, according to HPI, amounted to 172,540 contracts—15 per cent. above the July level and more than 25 per cent. higher than in August last year.

Credit sales of new cars reach peak levels

SALES of new cars in Britain on credit last month reached a peak level, according to figures published yesterday by Hire Purchase Information. The total hire-purchase and credit business in all types of vehicles last month, according to HPI, amounted to 172,540 contracts—15 per cent. above the July level and more than 25 per cent. higher than in August last year.

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Tour standards body rejected

BY ARTHUR SANDLES

THE ASSOCIATION of British Travel Agents has rejected the idea of an overall body to control travel promotions and tour standards. It has, however, agreed to examine ideas actively for an independent arbitration procedure to deal with complaints.
The association is alarmed about the industry's image after a year when there were "uncommonly large" numbers of complaints.
The ideas for both a control body and independent arbitration came from Clarksons, Britain's largest tour operator and a company which has received a measure of adverse publicity this year. The proposals were promptly rejected by some other companies.

Three needs

Now the ABTA chairman, Mr. Bob Waller, says: "With the rapid expansion of the holiday business this association has for some time been studying the idea of a standard arbitration scheme which could be adopted by all members. To be effective any such plan must fulfil three requirements: First it must be a simple procedure for our members and the public; secondly it must be inexpensive for the public but, at the same time, not open to abuse; and, thirdly, it must conform with the law."

Consultation issue

Although Mr. Waller said he welcomed the suggestion, I understand there was less welcome for the way in which Clarksons launched the idea. Mr. Waller went on to make it clear that ABTA intends to pursue its "get tough" policy over travel trade misbehaviour.

Press criticised

He thought this would be "yet another bureaucratic body". Although there had been allegations over control of hoteliers, booking procedures and administrative systems, he could find no one who doubted ABTA standards.

ON OTHER PAGES

NUCLEAR INDUSTRIES

Today's issue contains three pages (21-23) on Nuclear Industries. Advertising & Marketing 12 & 13 Appointments 19 Arts and Entertainment 19 Classified Appointments 7 & 20 Company News 16-18 Crossword 2 Economic Indicators 10 Export News 6 FT Share Information 28 & 29 International Company News 18 Labour Articles 8 & 15 Letters to the Editor 20 Lex and Law 20 Men and Matters 14 Mining News 17 Money Market 24 Overseas News 5, 7 & 9 RACE 2 SE Dealings and Statistics 26 & 27 Stock Exchange Report 25 Theatre and Cinema 3 The Technical Page 11 Today's Events 2 TV and Radio 2 Wall St. and Overseas Markets 24

THE £ ABROAD

NEW YORK (Spa) 89.45-89.51 (\$2.42-2.44) Do. (1 month) 89.45-89.51 (\$2.42-2.44) Do. (3 months) 89.45-89.51 (\$2.42-2.44) Do. (6 months) 89.45-89.51 (\$2.42-2.44) Do. (12 months) 89.45-89.51 (\$2.42-2.44)

National Institute forecast

Jobless level to remain high during 1972

BY WILLIAM KEEGAN, ECONOMICS CORRESPONDENT

UNEMPLOYMENT in Great Britain is likely to go on increasing until the first few months of next year and to stay at a high level for most of 1972, according to the latest Review of the National Institute of Economic and Social Research.
The Institute forecasts that by early next year the number of wholly unemployed people in Britain (excluding school-leavers) will have risen to between 850,000 and 900,000. This implies that the total figure for the U.K. as a whole, including Northern Ireland and temporarily stopped workers, could be not far short of 1m. by the end of the year.

Target level

The Institute almost agrees with the Chancellor's recent forecast that gross domestic product would rise by 4 in 1972, but it says that the rate of growth in 1972 would be 3.5 per cent. It also points out that, because the first half of this year turned out worse than had been officially expected, the latest target level for early 1972 is little different from the earlier one.

Wage rates

As a result of the recent cuts in purchase tax and the expected effects of the Confederation of British Industry's prices initiative in both nationalised industry and the private sector, the Institute envisages that the annual rate of increase in consumer prices will slow down from 7.8 per cent. to 5.4 per cent. (this would imply that the better-known retail prices index would rise by 7 in 8 per cent. next year, compared with the current rate of increase of about 10 per cent.).

People and places

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Letters to the Editor

Inventory control

Sir—The surprising factor in the recent correspondence on inventory control is the lack of comment from industry itself. Individuals and consultants are making sensible but general comments, but there is no hard practical response. I submit that this is because, at least within many small and medium-sized companies, inventory control is only paid lip service as a function that contributes to profitability and customer service. Mr. Vanderstegen (August 24) is quite right in citing poor inventory control systems as a principal obstacle to achieving improvements in marketing, buying and shop floor control. The theoretical interaction between marketing and inventory control may be understood by top management, but the results belie much practical expression. How many stock controllers have no guide other than "keep stocks down to X" or "reduce stock levels by Y per cent"? Control of inventory is one of the hardest things to do well even when clear policies are decided—without policies it becomes nothing more than inadequately recording what is held in stores.

Adverse effect

The more disturbing fact however is the adverse effect these deficiencies have on the country's export achievement and potential. The captive home market accepts to a large degree the casual delivery of goods, and the "sell and forget" tendencies of industry. Overseas customers are incensed. Late delivery of principal equipment is bad enough, but lack of spare parts is incalculable. I believe many of these problems basically stem from poor inventory control—management not knowing how to use a system to give the right results. The problem is compounded by the different policies and response times needed to handle spare parts orders from the Board, but a disruptive nuisance to the shop floor, and often treated as such. There appears to be a strong case for separating the spare order routines and placing them in the mainstream of production. Some of the larger companies have already done this and a few of the smaller ones beginning to appreciate the advantages. Shortages of skills and resources will always remain a handicap to the smaller companies.

To overcome these difficulties a new philosophy of industry export support may need to develop before improvement in inventory control and customer service can emerge. Motor and agricultural equipment manufacturers are already considering separate warehousing, order

processing and distribution and others should be encouraged to form small compatible units and follow suit. This separation will allow the production units to get on with the business of manufacture, with the warehouse acting as a major customer for wide-spaced spares. Reductions in stock-holding, faster response to orders, improved distribution, economic manufacturing quantities, satisfied customers and stronger marketing strategies should result. For the reasons given at the beginning of this letter probably nothing will change until our competitors show the way.

Richard Henry,
449, Fulham Palace Road, S.W.6.

Rapid growth of fraud

Sir—Although you reported (August 27) that Scotland Yard had revealed serious crimes in the first six months of this year, I could find no mention in your report of the much more significant statistic from the business point of view that the category crime growing fastest is fraud which is now increasing at the astronomical rate of 13 per cent per annum.

It gives little pleasure to be able to say "I told you so." But those of us who have for the past decade been warning the Board of Trade of the ever increasing means that unless it abandoned its complacent attitude towards fraudulent and mafia-type operators in the company field, and started using its investigatory powers in earnest and enforcing the law, company law would fall into complete disrepute, can nevertheless now do just that.

Those who regard fraud and illegality as evils foreign to this country, applicable at worst to a tiny minority of our companies, are living in the past. However tiny a minority was once afflicted, the accelerating 13 per cent growth rate that we now see is fast changing the scene. Board of Trade officials who these past ten years have sat back dreaming up more and more overtly unreal excuses for doing nothing in spite of being given ever increasing powers by Parliament and in spite of the fastest growing and most serious fast deteriorating situation now leave the City to reap the whirlwind.

For while the Insurance and Companies Departments' officials continue to ignore pleas for help which only the Board of Trade powers can give, from our overworked police force on the one side and from the investing public on the other, it is the City's

reputation that is slumping as fraud becomes a national disease.
M. J. G. Moir,
8, Phoenix House,
104/110, Charing Cross Road,
W.C2.

Banks & direct debit

Sir—I, too, have had a similar experience to Mr. Moir (August 26). In two successive months I had charged to my account on the direct debit system: (1) An insurance premium debited twice, once by direct debit and the other by bankers' order; (2) Somebody else's insurance premium; (3) An insurance premium twice the amount it should have been (on inquiry it appeared that the insurance clerk thought that the first premium had not been paid, and therefore doubled up the second month).

At an interview with the branch manager I was told: (1) The branch had little control on direct debits, it merely posted the accounts from a list supplied by the insurance company; (2) He, the manager, did not like the system, and his fellow branch managers had frequently brought the subject up at their conferences, but "nothing ever came of it"; (3) It was an administrative convenience, and bank charges

would need to be increased but for innovations like this. I never received a clear answer to my repeated question as to the authority he had to debit my account in this way. The conclusion I reached was that the ease of administration was paramount to the banks, and unlikely to change. Therefore one's account should be scrutinised very carefully as one can no longer rely on the banks to look after one's money.

E. R. Williams,
71, Southworth Road,
Newton-le-Willows, Lancs.

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Cornish tin production

Sir—The article "Britain's Minerals—a fresh look" which you published on August 25, is very interesting but it underestimates the possibilities of Cornwall as a producer of tin. It does not mention other metals such as zinc and copper.

The author, Dr. Stubbs, quite rightly points out that we cannot expect to develop another major tin field in Cornwall, but he is considerably greater than he appears to think. He speaks of a third mine coming into operation later this year—presumably referring to the new Wheal Pendarves Mine of Camborne Mines, which is also scheduled

Industrial Cinderellas—a lack of involvement

Sir—Over the past three weeks I have read with interest the correspondence and articles on the subject of Industrial Cinderellas and hope that I, too, may be embarrassed by a few home truths.

As a member of the staff of an organisation existing to give advice on how to get the best (not the most) from people at work, it has been my privilege to have trained and to have had close contact with approximately 2,000 foremen and supervisors over the past 21 years. During this period I have recorded the answers to certain questions I always put to delegates at various stages of a course, the answers, some of which are given below, are not intended to demonstrate statistical accuracy, but to show how, in practical terms, first line managers are being misused, in a way that is nothing short of financial suicide.

Viz. only 10 per cent. feel part of management, that is, are called managers, and are respected as such by bosses, peers and staff. Only 10 per cent. have clear-cut job descriptions, to include

levels of authority, responsibility and accountability (job descriptions are necessary for them to know what they have to do, not how to do it).

Less than 10 per cent. know what level of performance is required in their job, that is, by prior discussion and agreement what is an acceptable job. The remaining 90 per cent. know only by vague motivation "they should be better" or "they should be better by recognition when things go right."

Less than 10 per cent. regularly discuss anything with their boss other than essential production matters, for example, quantity, quality, cost, but about budgeting, development, training, new processes, impending changes.

Less than 10 per cent. are correctly involved in the hiring and firing processes. Surely the team leader should have a say regarding potential newcomers to the team; equally, he, as the immediate superior, should be the person to confirm dismissal, representing the final step in any negotiated and acceptable grievance procedure. Will

respect the foreman if his boss communicates such "decisions"? Less than 10 per cent. are given training in matters to do with finance/costing, organisation or the use of computers and other modern management services. Less than 10 per cent. of bosses either discuss or attempt to analyse the training or development of those reporting those directly to them; or discuss impending courses; or after a course what has been learnt and how this can be put into practice.

Finally, very much fewer than 10 per cent. of first line managers recognise that apart from a downward responsibility for training, they have an equally important upwards or boss training/supporting responsibility. Certainly few of their bosses readily accept that this is so or necessary.

These men really are "in the middle of the sandwich." They are effective as a manager if he feels allied to no one, accepting all the knocks yet receiving none of the accolades? Time after time it has been

seen that the success or failure of an organisation is ultimately achieved at shop floor level. The bosses exist to advise and should resist taking over in times of trouble.

It is often easy for the father who is not often present to gain the trappings of his co-operation for short periods. If, however, he gets too involved and interferes with the day-to-day routine of upbringing, the mother's authority may well be undermined. If both parents define and respect the role each has to play, the child is likely to develop into a stable and responsible being.

Let us in management therefore respect the role each has to play and realise that for an organisation to be fully effective, all including human resources, must be effectively deployed. For individuals this means being involved, being allowed to contribute and grow until we are "fully stretched."

David Morgan,
(Management and Training Adviser)
The Industrial Society,
1 Carlos Place, W.1.

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Invoice factoring

Sir—Miss P. M. Ford in her letter (August 31) on Invoice Factoring has not made the necessary distinction between invoice discounting and factoring. Invoice discounting does not include a clerical service and the cost of the funds raised by discounting invoices is calculated, normally, as a percentage per month—hence the figure mentioned of 1½ per cent per month, a figure not related to Bank Rate.

Factoring, on the other hand, does comprise a service of sales ledger administration, which includes the credit control and collection of debts, usually coupled with bad debt insurance. A service charge of between 0.75 per cent and 2 per cent of invoice value is made for this service. The finance is also made available, usually up to 80 per cent of invoice value, and the charge for the funds borrowed is between 2 per cent and 4 per cent over Bank Rate per annum charged on a day-to-day basis.

In invoice discounting, therefore, Miss Ford can have money without a service, which will cost her more than money raised by factoring. If she wants to raise money by factoring, she will have to consider the service charge as well as the interest charge and calculate whether she can make savings to offset this charge.

Oliver Cox,
Director, Arbutnot Factors,
37, Queen Street, E.C.4.

New exhibition centre

Sir—I have read with some interest some of the rival correspondence over Ronald Lyon's plan to establish an exhibition centre at Northolt. He plans a 600-bedroom hotel as well, he told us.

It is perhaps an unfair thing to say, but from my own experience he is talking of a doomed project. How can an exhibition centre of an international standing come to be based in an area such as London so long as the present chronic shortage of hotel accommodation exists? Six hundred bedrooms is insufficient to serve an international Coca Cola

conferance, never mind a major industrial exhibition, especially if visitors from overseas are to be accommodated elsewhere in the U.K. Chicago with a smaller hotel, the RAI in Amsterdam, the several hotels with 2,000 rooms or more. And they seem to think that the effect of an international traffic on that over-maze of country lanes will pass for a roadway system. Success.

Apart from these objections, would seem astonishing that £21m. project of this nature supported as it must be by a substantial aid from the Exchequer can be considered for the South of England, where there is already a shortage of labour when there are so many areas of unemployment at a high level, and where a project of this nature would be more than welcome. Both from Manchester and Glasgow direct flights are available to the Continent, to the major British cities and North America. Furthermore, space is no problem.

J. Richard M. Stead,
Miller's Ship,
Milton of Dumbarton.

Machines and unemployment

Sir—While I applaud a Royalist's compassion (Lombard column, August 31) for the increasing number of unemployed I cannot accept his solution. The cause of mounting unemployment, which I regret think must continue, is that more and more jobs are being replaced by machines than ever before. Every time there is new wage demand, employers manage to do with fewer hands and, regrettably, it is always middle-aged who are made redundant. They are always the most difficult to retrain and of jobs in new industries.

The solution must be, in a modern age, for people to be able to do with fewer hands and accept that a number of people will work for only the first 10 or two-thirds of their work life. The short week is partially desirable in monotonous jobs and it might require legal to be enforced if this is what people in this country want, that is, that everybody do work.

Any blow to the workers' pride could then be softened by giving them all higher unemployment pay.

Peter Cannon,
Master House,
Arthur Street, E.C.4.

Boulez

Any blow to the workers' pride could then be softened by giving them all higher unemployment pay.

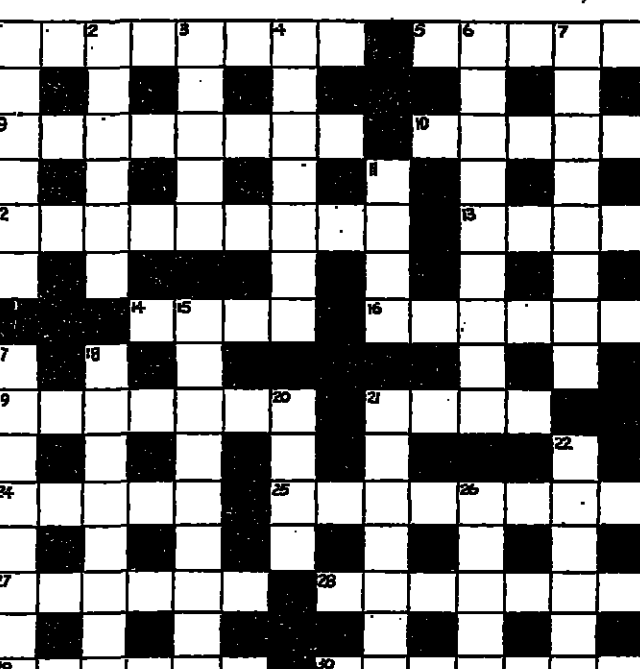
Peter Cannon,
Master House,
Arthur Street, E.C.4.

Events

To-day

COMPANY MEETINGS
AIRPLANE INDUSTRIES, Royal Garden Road, W.12. (Chairman, Mr. R. M. E. E. E. E.)
BRADFORD (ROBT.), Munster House, E.C.10. (Chairman, Mr. P. J. E. E. E.)
CARLTON INDUSTRIES, Winchester House, E.C.12. (Chairman, Mr. L. E. E. E.)
FLUENT ELECTRIC, Manchester, 12. (Chairman, Mr. J. V. E. E. E.)
WICKING PENTON, Nottingham, 12. (Chairman, Mr. A. J. E. E. E.)

F.T. CROSSWORD PUZZLE NO. 1,660



ACROSS

- The colonel finds the sea blue (5)
- Shuts the cathedral precincts (6)
- He was in yellow stockings and cross-gartered (8)
- Finished with the party? You have to exaggerate (6)
- Cause a disturbance like Adam and Eve (5, 4)
- Mountains held in grand esteem (5)
- Dwelling place of one worried by population explosion (4)
- It's just hell here (7)
- Friends like to keep it out of play (2, 5)
- Dishevelled inclination (4)
- The composer to give us pep (5)
- Striving with the favourite in the future (9)
- "Is thick" with patines of bright gold (M.O.V.) (6)
- Introduces America to her offence (6, 2)
- Indispensable chaps to let you in (5, 3)
- You must get love in it for heartiness (8)

DOWN

- The gunner arrived first for a snapshot (6)
- Deep in finance (6)
- Herb without strife is at liberty (5)
- I got a small contribution including thanks to copy (7)

SOLUTION TO PUZZLE No. 1,659

TV Radio

* Indicates programme in black and white.

BBC 1

- 1.00 p.m. Hobbies: People and their Hobbies. 1.30 Tales of the Riverbank. 1.45 News. 2.00 Show Jumping from Hickstead, Sussex. 4.20 Play School. 5.40 Jackanory. 5.45 Dastardly and Muttley. 5.15 Boy on an Island. 5.40 Abbott and Parsley. 5.44 Adventures of Parsley.
- 5.50 News.
- 6.00 Nationwide.
- 6.45 Expedition North America: Part 3, Bering Sea.
- 7.10 Top of the Pops.
- 7.50 The Family in the Family.
- 8.15 Presenting Keith Michell in a musical programme.
- 9.00 Nine O'Clock News.
- 9.20 The First Churchills.
- 10.00 Escape to Fulfillment: Part 2, The Week Hunter.
- 10.35 24 Hours.
- 11.15 Art and Technology: The Kinetics Show.

All Regions as BBC 1 except at the following times:

- Wales—6.00-6.45 p.m. Wales Today. 6.45-7.10 Heddidi. 10.05-10.25 Byd Y Boi.
- Scotland—6.00-6.45 p.m. Reporting Scotland. 12.02 a.m. Scottish News Headlines.
- Northern Ireland—6.00-6.45 p.m. Scene Around Sir. 12.02 a.m. Northern Ireland News Headlines.
- England—6.00-6.45 p.m. Look North (from Leeds, Manchester, Newcastle). Midlands Today (from Birmingham). Look South (from Norwich). Points West (from Bristol). South Today (from Southampton). Spotlight South-West (from Plymouth).
- 12.02 a.m. National News Headlines.

BBC 2

- 11.00 a.m. Play School.
- 7.20 p.m. News.
- 8.00 Canvas. Part 8: The Fighting Temeraire by J. M. W. Turner.
- 8.15 Trial.
- 9.05 Gardeners' World.
- 9.20 Show of the Week: The Two Honnies starring Ronnie Barker and Ronnie Corbett.
- 10.05 Sitar Master Class: Imrat Khan talks about the sitar.
- 10.50 News on 2.
- 10.55 Late Night Line-up.

RADIO 1 247m

Time checks, 6.00-6.15 a.m. Traffic reports, 6.15-6.30 a.m. 6.30-6.45 a.m. 6.45-7.00 a.m. 7.00-7.15 a.m. 7.15-7.30 a.m. 7.30-7.45 a.m. 7.45-8.00 a.m. 8.00-8.15 a.m. 8.15-8.30 a.m. 8.30-8.45 a.m. 8.45-9.00 a.m. 9.00-9.15 a.m. 9.15-9.30 a.m. 9.30-9.45 a.m. 9.45-10.00 a.m. 10.00-10.15 a.m. 10.15-10.30 a.m. 10.30-10.45 a.m. 10.45-11.00 a.m. 11.00-11.15 a.m. 11.15-11.30 a.m. 11.30-11.45 a.m. 11.45-12.00 a.m. 12.00-12.15 a.m. 12.15-12.30 a.m. 12.30-12.45 a.m. 12.45-1.00 a.m. 1.00-1.15 a.m. 1.15-1.30 a.m. 1.30-1.45 a.m. 1.45-2.00 a.m. 2.00-2.15 a.m. 2.15-2.30 a.m. 2.30-2.45 a.m. 2.45-3.00 a.m. 3.00-3.15 a.m. 3.15-3.30 a.m. 3.30-3.45 a.m. 3.45-4.00 a.m. 4.00-4.15 a.m. 4.15-4.30 a.m. 4.30-4.45 a.m. 4.45-5.00 a.m. 5.00-5.15 a.m. 5.15-5.30 a.m. 5.30-5.45 a.m. 5.45-6.00 a.m. 6.00-6.15 a.m. 6.15-6.30 a.m. 6.30-6.45 a.m. 6.45-7.00 a.m. 7.00-7.15 a.m. 7.15-7.30 a.m. 7.30-7.45 a.m. 7.45-8.00 a.m. 8.00-8.15 a.m. 8.15-8.30 a.m. 8.30-8.45 a.m. 8.45-9.00 a.m. 9.00-9.15 a.m. 9.15-9.30 a.m. 9.30-9.45 a.m. 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Police and RE's to leave Anguilla

By Hugh O'Shaughnessy
BRITAIN is to withdraw the contingent of 60 Royal Engineers from Anguilla within the next fortnight and will also take away the 30 strong contingent of Metropolitan Police by the end of next month. The remainder of the force is expected to leave in February. A local police force is being recruited and will be trained by a small number of British police officers who are to go to the island to help with the implementation of measures in Parliament last month to separate Anguilla from the rest of the Caribbean.

Grant-in-aid
The island was invaded by British troops and police in 1966 after continuing disturbances between the Anguillians and the British. The British government has agreed to pay a grant-in-aid of £70,000 a year to the Anguillians for the cost of the island's administration.

CHILE TO TAKE OVER TYRES
SANTIAGO, Sept. 1. The Chilean Government will buy a controlling interest in the Industria de Neumaticos SA (INSA) tyre manufacturing plant, the U.S. Tyre and Rubber Corp. has a 37 per cent share. Economy Minister Oscar Garretón said.

THE CARIBBEAN
Banana crisis in St. Lucia
FROM THE AIR it's a wonder St. Lucia manages to grow anything at all. After Dominica is probably the most rugged of the Windward Islands, with several peaks over 1,000 feet and numerous steep valleys. Only two districts are flat enough for straightforward cultivation. Yet St. Lucia manages to grow almost half the Windward Islands' output of bananas and has a good coconut industry besides.

Not all lost
As a result production and earnings fell by almost half and the Banana Growers Association, a statutory body which regulates sales and controls the industry, saw its reserves dwindle to nothing. It now faces bankruptcy and has issued appeals for help. Although the underlying strength of the banana market means that hope is not all lost, immediate prospects are being dimmed by renewed droughts - the rain has only just started, several months late.

The growers themselves are becoming dispirited. Despite an incentive scheme, fewer of them are replanting, and the association is noting a poor response to its appeals for rehabilitation. Although unable to mount any effective rescue operation, the Government is keeping its head. With the limited resources at its disposal it has decided to aim for longer-term objectives which will give the economy a sounder base and make it more capable of withstanding the buffets of forces over which it has no control. These include the modernisation of the banana industry and the diversion of surplus resources into other forms of agriculture.

Okun says Nixon's plans will weaken tax system

BY JOHN GRAHAM, U.S. EDITOR WASHINGTON, Sept. 1.

MR. ARTHUR OKUN, chairman of the Council of Economic Advisers in President Johnson's time and a highly respected economist, warned today that President Nixon's new economic policy would seriously weaken America's long-term tax base. The President's proposals, he said, would "undermine the tax system of the Congress" and "would squander nearly \$10,000 a year of the long-term revenue capacity of the Federal tax system." This would be a "grave mismanagement of the nation's priorities," he claimed.

TWA judgment against millionaire Hughes upheld
BY JUREK MARTIN NEW YORK, Sept. 1.
A COURT of appeals in New York today dealt another blow to Mr. Howard Hughes, the multi-millionaire recluse, in the two-year court battle stemming from Mr. Hughes' stewardship of Trans World Airlines.

Negotiations to extend Pacific coast railway
BY OUR OWN CORRESPONDENT VANCOUVER, Sept. 1.
NEGOTIATIONS are under way between Whitehorse and Skagway located at the top of the Lynn Canal in the Alaska Panhandle.

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هكزامن النحر
A Chaseman knows his money markets.
'Dollars, Sterling, Francs, Marks, Yen... if it's an international currency, Chase will make a market for you.'

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Ernie Angell heads Chase Manhattan's Money Division, a team of highly skilled professional dealers with immediate access to the world money markets. For foreign exchange trading and Sterling and Euro-currency deposits, we offer a ready market and give you a speedy, efficient and personal service.
Our Money Division, like all divisions at Chase is part of a world-wide banking network, designed to take care of any financial requirements quickly. That's why you should make Chase your international bank.
Talk to Ernie Angell about your money requirements. Or if there's any other banking service you need, call him anyway. He'll put you in touch with a Chaseman who specialises in your sphere of business or industry.
Ernie Angell's number is 01-600 6141. Call him today.
You have a friend at Chase Manhattan.
The Chase Manhattan Bank N.A., Woolgate House, Coleman Street, London EC2 and 1 Mount Street W1.

Export News

KNOW-HOW

ICI plans to sell software packages

A CHEMICAL plant design simulation programme developed by ICI and widely used throughout the company has been purchased by AKZO, the Dutch chemical company.

Designated Flowpack, the computer programme, which was developed at ICI's central instrument research laboratory at Runcorn, Cheshire, is stated to provide a comprehensive, general-purpose programme for steady-state design and simulation studies of complete chemical processes. This type of programme enables engineers to carry out optimisation studies which can result in substantial improvements in the profitability of new and existing processes.

As a result of its extensive use by ICI in an industrial environment, Flowpack is reliable and easy to programme the company claims (it can be used by engineers with limited computing experience). It is also comprehensive, flexible and highly efficient, ICI maintains.

ICI says this overseas sale of Flowpack is indicative of a trend to make more of the company's technical computer software commercially available to other companies. It is likely that programmes to perform a range of engineering calculations will be made available in the near future, ICI adds.

BUSINESS IN BRIEF

Taking ashes out of sackcloth

The Crown Agents acting for the Director-General of the East African Harbours Corporation have placed a £230,000 contract with GEC-Elliott Mechanical Handling—a GEC Elliott Automation company—for the supply, erection and commissioning of a bulk handling and conveying plant handling soda ash (sodium carbonate) at the port of Mombasa in Kenya.

Soda ash originating at Lake Magadi is delivered in bulk by box-car type rail wagons for export through the port of Mombasa, which has hitherto handled the product in bags. Due to an increased demand for bulk export, additional handling plant and considerable upgrading and refurbishing of existing equipment is now essential.

Material is extracted from the rail wagons into two existing covered ground storage areas each of 2,500 tons capacity and extracted for outloading by standard 3½ cubic yard capacity conveyors on to two conveyors having continuous weighing facilities. These belts in turn deliver to existing conveyors which will be converted to handle the soda ash in bulk.

Four new transportable conveyors will feed bulk material directly into the holds of a vessel lying alongside the quay. The rated capacity of the plant is 90 tons per hour and it is expected that commissioning will begin during April 1972. United Kingdom engineers for the project is the Mond Division of ICI at Northwich, Cheshire.

The Portuguese Company Eurofer (Fabrica Europeia De Ferro Maleavel, SRI) has awarded Birlec an £85,000 contract for heat treatment plant for its foundry being built at Oporto. The contract covers the design and manufacture of a continuous electrically heated furnace for annealing ferritic malleable iron castings. Sections of the plant will be built in Portugal to Birlec design, with Birlec manufacturing the remainder in the works at Aldridge.

The twin track tray pusher furnace will treat up to 730 kg/hr of castings, mainly pistons and parts for the motor industry. The furnace, which is heated throughout by electric tape elements, is divided into eight zones each independently controlled so that accurate process conditions are continuously maintained.

Incorporated in the installation will be mechanised charge handling equipment.

EXPORT PROMOTION

Anglo-German banking talks at trade week

FINANCIAL TIMES REPORTER

INFORMAL talks between British and West German bankers will take place in Hamburg on September 20 within the framework of the British Week to be held there from September 17 to 26, the Export Council for Europe said in London yesterday.

This will follow a meeting of the Group of Ten in London on September 15. Meetings of the Six and the International Monetary Fund are also scheduled for that month.

The Hamburg meeting has been arranged on the initiative of Mr. E. J. W. Hellmuth, a deputy chairman of the Export Council for Europe, part of the British National Export Council, and leader of the ECE's German team. He is also executive director of the Midland Bank. Nearly a dozen British banks, including Barclays DCO, The Standard Bank, and Lazard Bros., will be going to Hamburg. They will be led by Mr. Gordon Richardson, chairman of J. Henry Schroder Wagg and Co.

This Anglo-German Banking meeting will take the form of a working dinner, at which the host will be Sir Roger Jackson, British Ambassador in Bonn. German guests will be headed by Dr. Alwin Muenchmeyer, chairman of the Bundesverband des Privatbankens.

"The British Trade Week has all along placed great emphasis on Britain's 'invisible' assets such as her world financial services," the ECE says.

Sir Roger will also be host at an informal dinner to discuss international insurance matters and conferences will deal with Britain as a trading partner.

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licensing of processes, property development and airport planning. There will also be a four-day conference on advanced British technology organised by the London Chamber of Commerce.

The trade week, organised by the ECE and the Department of Trade and Industry, also includes store promotions and a Living British exhibition.

Until recently, small air companies in Zambia have been operating unsafely and rationally into larger commercial

units is seen as a step towards benefiting Zambia's industry generally and the local air industry itself.

A director of Spencer Aviation has been invited to join the new company to assist in its initial organisation and administration. Zamair will be capitalised at £500,000.

Application has been made to the Zamair Government for Zamair to operate 15 aircraft ranging from Britten Norman Islanders to Learjet 24s. In addition, Zamair Airways has approved the operation by the new company of scheduled services in rural areas, to act as feeder services to Zambia Airways.

The new company will be named Zamair and will offer nationwide charter services and internal feeder services in Zambia where the air transport industry is of vital importance to the national economy.

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An airline to serve Zambia's outback

SPENCER AVIATION, the London-based international aviation company, is joining with Zamair of Ndola and Kitwe and Skytravel of Lusaka to form a public company operating in the fields of aircraft sales, maintenance and air charter in Zambia.

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units is seen as a step towards benefiting Zambia's industry generally and the local air industry itself.

Meanwhile—back on earth

FOSSMAC EXPORT, the international marketing company formed for the Fossec Construction Services Group, has won orders for more than 25,000 plastic WC seats from Hardware Merchants of Zambia, a division of the Zambia State Trading Organisation INDECO.

This is a record export order for the Group, whose members include Robert McCard and Company of Denton, Manchester—the largest manufacturers of WC seats in the United Kingdom—and its subsidiary company, Celmec (Ireland) of Wicklow, Republic of Ireland.

The plastic seats, ordered for general distribution throughout Zambia, were manufactured at Wicklow by Celmec (Ireland). Orders were confirmed by Alfred Field of Birmingham.

Pop bins in Canada

THE Volumatic Company of Coventry has appointed an agent in Canada for its range of point of purchase and display products.

Laurentian Agencies of Quebec, a subsidiary of the National Drug and Chemical Company of Canada, has been given an agency in Canada for the company's Pop bin—a transparent, plastic sphere-shaped retail sales bin.

An initial order for 600 units will be placed with the Volumatic Company following the agency appointment and inquiries are in hand for a further 2,500 units. The 600 units will be used by the National Drug and Chemical Company as a sales promotion aid in its own group of retail pharmacies which include the Good Neighbour Pharmacy, the Chemo Company, Spencers, and Top Volume Stores.

With annual sales of \$85m., the National Drug Company claims to be one of the largest groups in its field in Canada. This latest agreement means that the Volumatic Company now has agents for its Pop bin in Holland, France and Canada with a licensing agreement for the product in W. Germany.

BRITAIN'S "second force" airline, Caledonian/BUA, has changed its name to British Caledonian Airways, giving the company a more positive identity.

Mr. Adam Thomson, chairman and managing director, said the new name was designed to reflect the major international status of the airline, particularly its role as a British national flag carrier on many world routes. At the same time it allowed the airline to retain its Scottish personality and identity.

VC-10s, eight Boeing 707-320Cs and 20 BAC One-Elevens.

The new name was chosen after research at home and overseas as well as within the company. It was found that the interim name of Caledonian/BUA was causing some confusion, particularly in the travel trade.

A spokesman said that an initial check with some of the airline's 3,000 employees showed that the new name was proving extremely popular. Any cost of changing the name, which would be relatively small, would be far outweighed by the benefits of positive identification, he added.

BRISK TURNOVER ON SCOTTISH SE

Business in August on the Scottish Stock Exchange fell £7.1m. on the month to £32.9m. However, it was more than £20m. greater than the turnover of August of last year.

Joint U.K. and Maltese offshore venture

BY JAMES McDONALD, SHIPPING CORRESPONDENT

OCEAN INCHCAPE (OIL) and a British shipping group, with a Maltese company, The Cecil and Henry Pace Organisation, have formed a joint company—Malla Offshore (MOSS). It will provide sophisticated services and supplies to international oil companies searching for and producing oil and gas in Maltese waters.

The Cecil and Henry Pace Organisation is a leading Maltese industrial concern with major interests in banking, engineering, shipping, marine contracting and hotels. All these facilities will be made available to the new company. Maltese National Lines is a subsidiary of the Pace Organisation.

100 vessels

The principals of Ocean Inchcape are Ocean Steam Ship Company, of Liverpool, and Inchcape and Company, London. Ocean is one of the largest

£35m. prototype fast reactor 'in operation by end of 1972'

FINANCIAL TIMES REPORTER

BRITAIN'S £35m. prototype fast reactor is nearing completion here, and would be in operation towards the end of 1972, according to Mr. Peter Mummery, director of the Dounreay establishment. Commissioning trials would begin early next year.

"I think this is opening a new era not only for this country but for the rest of the world," he told an international party of Pressmen visiting the plant.

The party included journalists from Japan, China and the U.S. who are here preparatory to the opening in Geneva next week of the United Nations' fourth international conference on peaceful uses of atomic energy.

The running cost of a commercial fast reactor would be about one quarter of a conventional power station. Building costs, however, would be about one third more, Mr. Mummery explained.

Main feature

The main feature of the plutonium-fuelled fast reactor is that it reproduces plutonium in excess of its requirements.

The PFR, which will produce 250 MW, is vastly superior to the 14 MW experimental fast reactor started at Dounreay in 1959.

The new fast reactor, which is the U.S. Germany and Japan had based on research work of the Dounreay fast reactor, will be able to supply enough electricity to the National Grid for a city the size of Aberdeen.

Electricity supplied by the PFR could bring in, at present rates, an income of about £4m. a year.

Lead station

Mr. Richard Moore, a member of the U.K. Atomic Energy Authority, said a strategic plan had been thrashed out "which will lead to an option to build a 'lead' station, starting construction in 1974."

After an interval of time this could be followed by an installation programme of fast reactor power stations. The electricity authorities should have at least one fast reactor station producing electricity before 1980, he claimed.

Britain, which had long held a lead in the development of the fast reactor, hoped for overseas orders. Mr. Moore added that the USSR was well advanced towards completing its own prototype station, France had a prototype under construction and Dounreay

show which extends over the next few days until Sunday, the U.K. manufacturers and distributors of light and business aircraft will be able to consolidate into firm orders the high volume of interest being shown here.

One of the most significant exhibits is the Russian Yak-40 three-engined business and light transport aircraft, currently the subject of a major Russian overseas sales campaign.

£340,000 contract

At least 15 different types of aircraft are on display during the course of the show, the chairman and chief executives of over 50 of Britain's biggest companies will be visiting Cranfield at the invitation of the Business Aircraft Users' Association, Flight International, and other bodies interested in the aircraft industry in order to gain at first hand some knowledge of what business aircraft have to offer.

It was announced here today by International Aero Show that the Government of Somalia has signed a contract worth more than £340,000 with the company to provide air-traffic control and telecommunications equipment for the flight information centre at Mogadiscio.

It was also announced that Quinton Hazell, the motor component group, had bought a

Beechcraft Queenair A65 executive aircraft worth about £110,000 from Eagle Aircraft Services, Levensham, Herk.

Mr. Bernard Carfoot, vice chairman of Allied Breweries, told a seminar on the use of business aircraft that the justification of company aircraft could not be measured in terms of cost of other methods of transport and hotel bills.

The chief justification of company aircraft was the mobility of executives, who are able to cover much more ground and make important decisions while either "produce" a substantial capital realisation, or save substantial revenue costs.

Divisions

Allied Breweries had instance each year of decisions made possible by the type of mobility which use the cost of operating its three aircraft. Mr. Carfoot to the conference, organised by the British Aircraft Users' Association.

The Cranfield show was officially opened by Mr. Frederic Corfield, Minister for Aerospace who said that Britons must become more air-orientated if a business air travel were to become more common. Such exhibitions helped in bringing the public greater awareness of the benefits of air transport.

HAWKER SIDDELEY AVIATION is confident of substantial further sales of its HS-125 executive jet aircraft, and foresees the production line at its Chester factory continuing for many years to come.

The company expects to announce soon the sale of its 250th HS-125, of which no less than 198, worth over £75m., have been exported.

This was revealed here today at the Business and Light Aircraft Show at the Cranfield Institute of Technology where a wide range of British and foreign general and business aircraft were put on display—in the biggest show of its kind yet held anywhere in the world outside the U.S.

The emphasis at the show is on promoting the use of business aircraft among U.K. companies in the light of Britain's bid to enter the Common Market.

Spokesmen for the manufacturers, distributors and dealers of all kinds of business aircraft here confirmed that home and overseas aircraft utilisation was now increasing and the volume of inquiries from companies interested in this form of aviation was now also expanding.

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European News

IN BRIEF

● **SOVIET** Minister of Foreign Trade, Mr. Nikolai S. Patolichev, is expected to visit Tokyo from September 21 to September 25, the Japanese Ministry of Foreign Affairs announced yesterday. The announcement said that Mr. Patolichev will discuss Japan's economic assistance and co-operation for a further development of Soviet Siberia.

● **NORWEGIAN** engineering experts have now given the green light for a resumption of work on the giant oil storage tanks which the Phillips group plans to put on the sea bed by its Ekofisk oil field. Work was temporarily halted last week because of Norwegian fears that the tanks would be too strong enough. The experts said work on the cement tank could proceed if the French engineering firm which designed it would revise the design in certain respects.

● **SWITZERLAND** yesterday decided to recognise the Government of North Vietnam, a Government spokesman announced in Bern. About a score of countries—mainly Communist—have now recognised North Vietnam.

● **ICELAND** has told Britain and West Germany it intends to abrogate its 1961 fishing limit treaties with them and to widen the limits from 12 to 50 nautical miles no later than September 1 next year.

● **ITALIAN** Prime Minister Emilio Colombo yesterday chaired a top-level meeting at which Treasury Minister Mario Ferrari Aggradi and Finance Minister Luigi Preti discussed latest monetary developments with the Governor of the Bank of Italy Guido Carli and other monetary specialists.

Bourse securities move

By Adrian Dicks

PARIS, Sept. 1.

THE COMMISSION des Operations de Bourse, the watchdog body over the French securities market, has given permission for two property investment funds to resume advertising for deposits. The COB's action is the first step in the slow process of cleaning up the suspicion thrown over the whole sector by the scandal which broke earlier this summer surrounding the operations of several of the funds.

Permission to advertise has been given to L'Epargne Fonciere and to La Participation Fonciere after close scrutiny by the COB and by independent valuers of the books and property portfolios of the two companies. In a statement issued last night the COB explained that advertisement material would henceforth give subscribers and potential subscribers a truthful account of the property funds' affairs, though the permits issued did not amount to an endorsement by the COB of either the management or investment policies of the funds in question.

THE GREEK REGIME

BY OUR ATHENS CORRESPONDENT

can only be attributed to Mr. Papadopoulos' persuasive powers. In the four and a half years since the army coup, the colonels have not succeeded in gaining an impressive degree of popular support. Mr. Papadopoulos, therefore, may have convinced his colleagues of the need to proselytise the rural masses at close quarters. Moreover, the administration in the President aided by a sub-servient Parliament. Very few believe that the Prime Minister will eventually lead the country to general elections and then withdraw from the political scene.

Whatever his plans for the future, Mr. Papadopoulos obviously feels strong enough at the moment to indulge in Nasser-type

Bundesbank favours dollar devaluation against gold

BY CHRISTOPHER LORENZ FRANKFURT, Sept. 1.

DR. OTMAR EMMINGER, the Vice-President of the Bundesbank, said today he was in favour of an increase in the price of gold, but indicated that the chances of such a move taking place were small.

Referring to reports that he had advocated a 6 per cent. gold price increase during a meeting of monetary experts in Austria last week, Dr. Emminger said he had asked the American experts present whether such a downward movement of the dollar was more likely now than it was a few months ago. He had said that he saw such a move as a useful shortening of the process of readjusting parties.

The U.S. experts replied that such a change in the gold parity of the dollar would still run into extreme difficulties in Congress. The Vice-President reported.

Dr. Emminger told a Press conference that, taking into account other countries' increased flexibility, yesterday's average D-Mark revaluation rate was 5.4 per cent. This compared with a rate of 7.8 per cent. against the dollar alone, and an effective rate of 6.6 per cent. on August 18, before the closing of the markets.

The Bundesbank President, Dr. Karl Klasen, refused to say whether he considered yesterday's effective rate was "high". The rate varied vis-a-vis each country. But in relation to Japan alone it was definitely excessive.

This statement lent force to Dr. Klasen's apparent doubt that the floating of the yen would prompt the U.S. to remove its import surcharge. But the Bundesbank President said he hoped the forthcoming round of international monetary negotiations would clarify under what circumstances the U.S. will be prepared to take such action. "We must know that," he added.

Dr. Klasen would not be drawn on what Germany's representatives would propose at the talks which kick off next week-end with a meeting of the EEC monetary committee and of the Group of Ten deputies—saying merely that he hoped the talks would lead to international agreement. They would certainly show what sort of political decisions the various governments were prepared to take now they had experienced a period of increased flexibility.

More Germans on short-time

BY CHRISTOPHER LORENZ FRANKFURT, Sept. 1.

FOR THE SECOND time within a week a well-known West German company has announced that President Nixon's new economic policy has forced it to curtail production. To-day it was the turn of Pfafl-Industrie Maschinen, a machinery company based in the Rhineland-Palatinate. From the beginning of October, it will put 4,900 workers on short time for an indefinite period, closing its Kaiserslautern works on Fridays.

As with Olympia Werke, a machine company which last week decided to dismiss an unspecified number of its employees, Pfafl said the cutback was caused by a deterioration in orders following monetary developments, particularly the new American import surcharge. The company exports almost two-thirds of its exports.

Pfafl said that immediately after the American measures were announced, it had to reckon with cancellations, not only from the U.S., but also from countries which were expecting to have their exports severely hit.

The company sells much of its machinery to the clothing and shoe industries and it is understood that many of the cancellations came from countries which are strong in these sectors. The company, which had a turnover

Soviet rouble adjustment

BY A. H. HERMANN

THE SOVIET State Bank has adjusted the exchange rates of western currencies against the rouble so as to come closer to new currency relations likely to result from flotation. The monthly list of exchange rates published for September yesterday kept the rouble pegged to the dollar while setting higher rates for some fifteen foreign currencies.

The new rate for the pound is 2.30 roubles (against 2.1773 in August), roubles 26.63 (25.97 for 100 D-Marks, and roubles 22.73 (22.02) for 100 Swiss francs.

The monopoly of foreign trade operated by the Soviet Government makes import and export transactions virtually independent of exchange rates which are fixed arbitrarily and do not reflect the relation between domestic and foreign prices for exported or imported goods. The present adjustment of exchange rates is necessary for technical reasons.

The reason why the Soviet State Bank rather raised the rate for fifteen other currencies instead of lowering the rate for the dollar is also purely technical. Though officially the rouble is pegged to gold, the Soviet foreign trade practice appears to be based on the assumption that it is pegged to the dollar. The majority of foreign trade and credit operations is in dollars.

NATO talks on force reductions

BY OUR OWN CORRESPONDENT BRUSSELS, September 1.

THE NATO allies to-day welcomed the four power draft agreement on Berlin as "an important step towards East-West détente." They also agreed that a special meeting of deputy foreign ministers will be held in Brussels on October 5 and 6 to discuss negotiations with the East on mutual and balanced force reductions (MBFR).

The two issues are closely linked because, for some time, NATO countries have made a satisfactory settlement of the Berlin question the main precondition for a conference on European security that has been proposed by the Warsaw Pact.

The deputy foreign ministers will almost certainly nominate Signor Manlio Brosio, the retired

Still shrouded in ambiguity

BY OUR ATHENS CORRESPONDENT

Although these overtures to the East are still couched in terms of an improvement in trade and cultural relations, they have already drawn fire from members of the Revolution Retired Colonel Demetrios Stamatiopoulos, one of the protagonists of the army coup, who has since parted ways with his former friends, accused Mr. Papadopoulos of having deviated from the aims of the revolution, hinted at growing corruption, and warned against Greece being drawn into the non-aligned or Communist camp.

Since the colonels seized power in April, 1967, they have been assisted by a series of political events in the Mediterranean area—the crisis in Czechoslovakia, the Arab-Israeli war, followed by anti-Americanism in Turkey, Libya and Morocco, and recently Malta's anti-NATO stance.

All these events have tended to make Greece a more appreciated ally and more Papadopoulos less vulnerable to pressure.

On the other hand, since Greece cannot easily survive economically outside the Western world, the regime can ill afford to make enemies in that camp. Some OECD countries have suspended financial assistance, and the EEC has frozen relations until democracy is restored, including a lending programme by the European Investment Bank. Actual foreign investment has not been forthcoming at the desired pace, and the balance of payments deficit will continue to increase unless unpopular restrictive measures are taken.

At the same time he has repeatedly praised Greece's Communist Balkan neighbours for their understanding and co-operation, and in a nationwide speech last Saturday he spoke of the necessity of recognising China as the third big Power, perhaps indicating that his regime is toying with the idea of extending official recognition to that country.

Critical

It is in this context that the suspension of American military aid should be seen. For if this aid is finally not granted, the Papadopoulos regime will have to spend some \$20m. to \$30m. of badly needed foreign exchange to keep its military forces up to par. Continued pressure from Greece's allies would obviously make life difficult for the colonels.

But it could also push the regime into believing that it can play off the East against the West. In a recent interview with a foreign journalist, Mr. Papadopoulos claimed it was not the Soviet Union which was wounding his regime, but Greece's allies who were driving it into the non-aligned camp.

Probably as further proof that he would not bow to pressure from the West, Mr. Papadopoulos did not include any former politicians in his new Cabinet last week. In the last three months, Mr. Papadopoulos has conferred with 20 politicians of the pre-Revolutionary era. Most of them, if not all, came out of their meeting with the Prime Minister convinced that he sincerely wanted a return to parliamentary rule and apparently confident that they would be called upon to do the bridge-building.

Mr. Papadopoulos may still do this at a later stage of the game, or he may have attempted simply to split the opposition's ranks. The leadership and many of the former political parties continue to adopt a negative position towards the military regime with the occasional critical statement. Mr. Papadopoulos says they will have no part in Greece's political future. They claim he is trying to drag them into a political arena for a disguised dictatorship.

Whether King Constantine, still in exile in Rome, will have a part in Greece's future is also open to question. To the regime's displeasure, the King has in recent months received several ambassadors accredited to Greece, including the American and British envoys. President Makarios of Cyprus, too, still insists on briefing the monarch on the Cyprus issue. These activities, coupled with reports that the King has encouraged the U.S. to build up pressure for a return to democracy, are hardly likely to improve his already shaky position.

Four and a half years after the colonels seized power, the former artillery colonel who led the coup has emerged as the absolute leader. But the future course of Greece remains shrouded in the same ambiguity that was on the day of the

Portuguese police accused of brutality

By Our Own Correspondent LISBON, Sept. 1.

A RESPECTED Portuguese prisoners' aid organisation today said that the number of political detainees had more than doubled during the first seven months of this year, and charged that a "brutal wave" of arrests was taking place involving "indiscriminate jailing, torture and beating, the systematic refusal of legal aid, and other illegalities."

The National Commission for Aid to Political Prisoners (GNPFP) said in a special communiqué from its Lisbon headquarters that at the beginning of the year there were 70 political prisoners, including both those serving sentences and those under preventive detention. By August 15 this figure had jumped to 160. Seventy of those in jail were serving sentences, and 90 were under preventive detention. The figures relate only to European Portugal and do not include detainees in the African colonies.

The Commission, which consists of lawyers and other professional men and women, and which has in the past shown itself remarkably temperate in its public pronouncements, declared: "The brutal wave of arrests by PIDE (the security police) in the last few months has greatly changed the picture of police repression in our country, not only in number but also in the type of people they arrest. 'Indiscriminate jailing, torture and beating, the systematic refusal of legal aid as well as other illegalities to those detained—although this is a constant policy of the Government, it has recently reached such intensity and ferocity that it would seem to indicate that they are being endorsed by the Government.'

There is considerable speculation, meanwhile, about the future of the Interior Minister, Dr. Goncalves Raposo, who was appointed by Dr. Salazar.

Germany buys U.S. Phantoms for \$750m.

By John Graham, U.S. Editor

WASHINGTON, Sept. 1.

WEST GERMANY has agreed to buy 175 of the newest Phantoms from McDonnell Douglas for a total price of \$750m., according to a statement today by Mr. Laird, U.S. Secretary of Defence. Mr. Laird made the announcement because it is a Government-to-Government deal, part of the continuing business of offsetting American defence expenditures in Europe.

The aeroplane in question is known as the F-4F, and is a new "air superiority" lighter-weight model than Phantoms already flying. It is a fighter, aircraft, not a fighter-bomber, and it is the first order for it. McDonnell Douglas will begin the production run as soon as possible, but has not disclosed the delivery schedule.

The German Air Force already has a reconnaissance version of the F-4E and announced its intention of buying more fighters last spring. The negotiations were completed this week.

BY C. P. SNOW

by Patrick O'Farrell
An important reinterpretation of Anglo-Irish history showing that the conflict is essentially a clash between two societies with quite different cultures and attitudes—the one basically religious and the other political.



To Russia with love

BY ANTHONY PAUL

the dim background, one of two tolerable if colourless men. In all the rush of characters and incidents the participants, as opposed to their appalling circumstances, are touched in lightly.

Only one or two stand out as solid comic creations, rather than mere implements or victims of suffering: Wanda, with her defence of loud, dirty jokes, some of them quite funny; dreadful mean Edwin, for a time

BY T. C. WORSLEY



BY ANDREW PORTER

Catholic children are always crows; they have an extremely limited vocabulary; and they are young. They are also attractive; in this compelling book, they—and the Foundation that houses them—attract both murderer and ex-Detective Superintendent Pibble (protagonist of other adventures by Mr. Dickinson). In addition to the plotting, its varied and entertaining cast of characters, the book is remarkable also for the high quality and the constant, unobtrusive wit of the writing. W.W.

[illegible]

tender of the Sir Alfred McAlpine Assoc. and the McAlpine and Son/Leonard Fairclough con- Ring Road at Tarbock;

In Smaller Companies

BY HAROLD BOLTER, INDUSTRIAL CORRESPONDENT

formance on the part of small firms may, both be partly explained by, and account for, the slight tendency of their average selling price to rise faster than those of large firms," the authors say.

It is also suggested that small companies appear to have experienced less widespread cyclical fluctuations than larger ones.

Skilled labour

Although the output growth of

Equity Issues were less than in the case of the other non-quoted companies, the authors suggest. This is consistent with a finding that the occurrence of equity issues in the past, for term securities or equities, rose with increasing company size.

The reliance of small companies on inward foreign funds is less, as much as they rely on inward external funds as difficulty in doing so. The same indication, however, is

small companies has fallen behind that of large companies, the lack of which has been a major factor frequently specified by small companies as a factor limiting output. On the other hand, shortages of skilled labour and of managerial personnel have been relatively more important constraints on growth of small companies than of others.

Small companies appear to have been hit more by credit squeeze, although they have been relatively free from the supply shortages of raw materials.

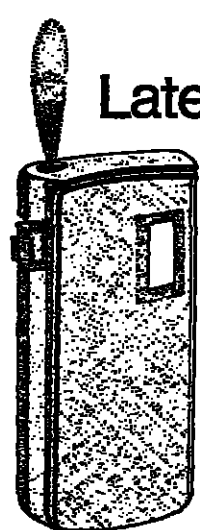
1971 1

		4th qtr.	3rd qtr.	Year	4th qtr.
Plastics*	'000 tons	375.3	356.7	1,463.1	384.7
Production.	† Deliveries.	‡ Net sales.	§ Consumption.	¶ Exports.	• Imports.

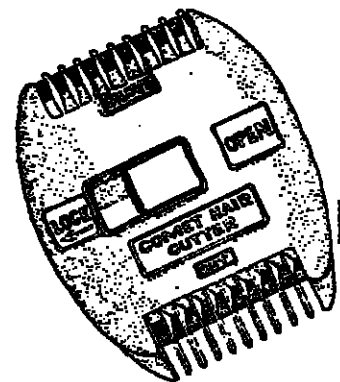
Britain, not seasonally adjusted. ** Seasonally adjusted. Excluding car radio
non-food manufacturing industries. || Excluding car radio

Say the right things on Thames, and the right people will listen.

Thames Television puts you in touch with twelve million people.
But you don't have to sell to them all to be successful.
You can afford a little of what the unenlightened call wastage.

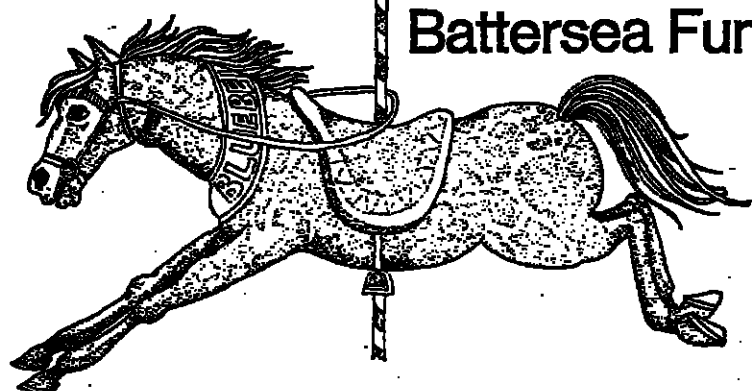


Lately on Thames we've been selling Ronson Lighters as well as Ship Matches.



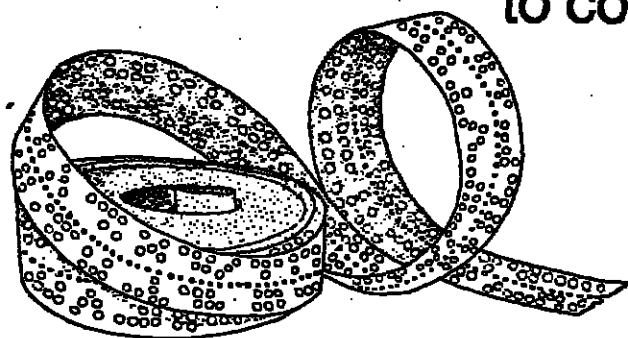
Luxury hair dryers as well as inexpensive home hair-cutters.

We've sent people to the St James's Antique Fair and Battersea Funfair.

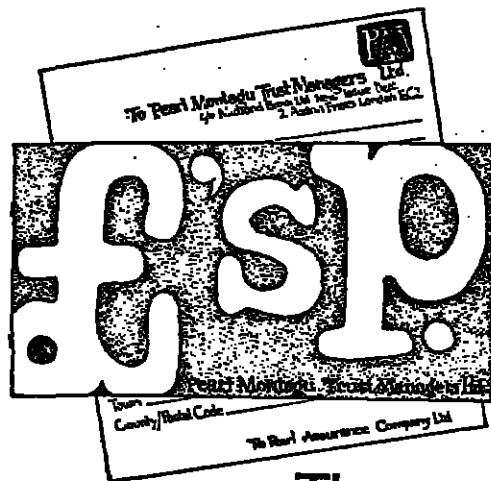
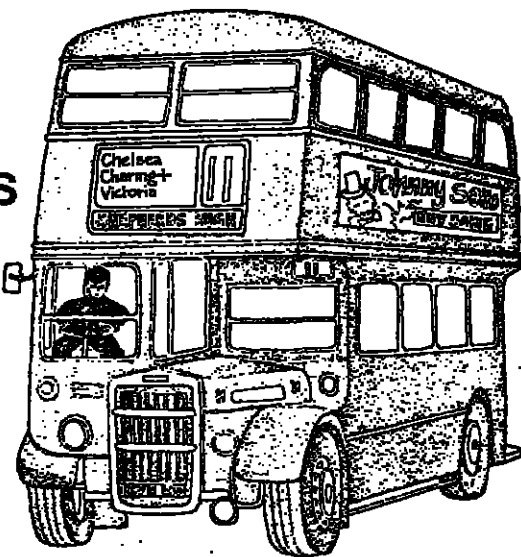


We've sold them Coalite by the bag and central heating by the Gas Council.

The one thing more important than the size of our audience is television's ability to communicate with all of them. (And economically. Some of the campaigns on this page cost less than £1,000.)



We can recruit computer staff for Autonomics as well as drivers for London Transport.



We can interest people in Pearl Montagu Unit Trusts as well as Boots Gift Vouchers.

Thames covers 90% of the people in and around London — far more than any newspaper or magazine. So even if your market is a fraction of the population, you'll be sure of covering more of them on television.

If you'd like to know more about the cost-effectiveness of television, call George Cooper at Thames.



Thames Television, 306 Euston Road
London NW1 3BB 01-367 9494

Advertising and

Sad reading for media

BY MICHAEL RYAN

THE NEW national readership survey covering the period July 1970-June 1971 was delivered to subscribers over the holiday week-end. Compared with the previous NRS, readership levels are generally lower—55 publications showed decreases against 40 increases.

Women's magazines are particularly badly hit—the mass-scale weeklies and almost all the monthlies are well down. On the other hand the general monthlies and male-oriented magazines tend to be up. This bears out other information to the effect that the combination of high levels of cost and wage inflation has tended to hit housewives but benefit their husbands.

Among national dailies several million-tones are passed. The Daily Mirror has fallen below 15 million readers and the Daily Express below 10 million, while the Guardian has exceeded one million for the first time. The Sun has shot up above 7 million. However most of the interviews were done before the relaunch of the Daily Mail and the survey gives no indication of how these two events have affected readership of other papers, nor who the readers of the new Mail are.

From January, 1971, the NRS has included a series of questions on ownership of consumer durables. An estimated 1,648,800 adults (15 plus) are members of colour TV owning (or renting) households. Assuming 2.2 adults per colour TV household this

Readership Estimates for National Newspapers	1970-71
Daily Mirror	13.2m
Daily Express	10.0m
Sun	7.1m
Daily Telegraph	3.5m
The Times	1.7m
Financial Times	1.4m
News of the World	3.2m
People	1.0m
Sunday Mirror	3.0m
Sunday Express	1.0m
Sunday Times	0.8m
Observer	0.7m
Sunday Telegraph	0.5m
Source: JICNARS July 1970-71	

means about 750,000 homes with colour TV in April, the midpoint of the fieldwork period. This well in line with manufacturer estimates.

No demographic breakdown are given in the report for colour TV (they could be obtained special analysis), but newspaper readership gives an indication of the sort of people who have colour TV. Colour TV owners among readers of national dailies varies from 0.2 per cent. of readers of the Daily Mirror (Scotland only) and the Daily Sketch, through the Mirror and Sun (0.3 per cent), the Guardian (0.4 per cent), the Express (0.5 per cent), the Daily Mail (0.8 per cent) up to the Times and Daily Telegraph (0.9 per cent) and Financial Times (1.4 per cent).

ITV revenue holding up

ITV's advertising revenue was up by just over £300,000 in July compared with the same month in 1969. According to the Independent TV Companies Association the net amount was nearly £6.5m, against just under £6.5m last year.

In recent years the July figure has been around £6.2m-£6.4m, so the increased level of revenue seen in the first half year seems to be keeping up. July is usually down on June and this was true this year but last June's £6.2m was a record.

The figures are net ad. revenue after deduction of agency commissions and all discounts.

Katie & Philip in £1m. move

BROOKE Bond, Oxo will be spending nearly £1m. to establish Katie and Philip, the pair, in America. In the eye of the public, that is. As Ant Thornicroft reported on July 1, the couple have been moved America for the latest TV campaign.

The switch allows for the heavy story to be re-presented. Advertising will begin on September 6 and run until April. The series consists of five second and two 30-second spots. J. Walter Thompson is the agency.

Fighting drugs with ads.

BY PAMELA JUDGE

IN THE U.S. advertising will have to "tell it like it is" to a military. But in each case much greater degree than ever before, according to Compton but to get people thinking. Advertising Inc.'s president Milt Gossett. The reasons for this include consumerism, concern for the environment and women's age and students posed a difficult problem. "They're increasing need for documentation of claims made by advertisers," Gossett, New York born and 23 years a Compton man, is over in the U.K. for his first extended visit.

In the States Gossett is responsible for Compton's creative output. One of the agency's biggest projects has been the current anti-drugs campaign. This has been done through the Advertising Council which is a public service organisation that runs national campaigns with the voluntary cooperation of agencies, advertisers and media.

To date it is reckoned that some \$50m. worth of media space and time has been donated in the anti-drug cause. Among all the publicity is a Government booklet for parents and requests for this total some 500,000. And Gossett puts a \$750,000 tag on the amount of agency time spent. Compton's approach was to segment the market into pre-teenagers, students, parents, teenagers, and adults. In each case the idea was not to preach or to get people thinking. "Why do they think they call it dope?" To the environment and women's age and students posed a difficult problem. "They're increasing need for documentation of claims made by advertisers," Gossett, New York born and 23 years a Compton man, is over in the U.K. for his first extended visit.

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The Marketing Scene

You might think a large multi-national advertising agency offering a wide range of extra services carried all the advantages in gaining new clients. Not necessarily says research commissioned by Lintas and here reviewed by ANTONY THORNCROFT.

An advertiser's guide to agencies

What do companies think of sending the clients' problems advertising agencies? Why do they select one in favour of others, and who makes the decision? These questions have always fascinated advertising executives, who are constantly pre-occupied with their own agency, but there have been few serious research studies attempting to answer the questions. Just over a year ago, however, Lintas was moved to get together with research company MIL to try to establish some solid information about the agency selection process. The results were given in a paper delivered at the ESOMAR conference in Helsinki last week by Gerald de Groot of Lintas and Stan Orwell of MIL.

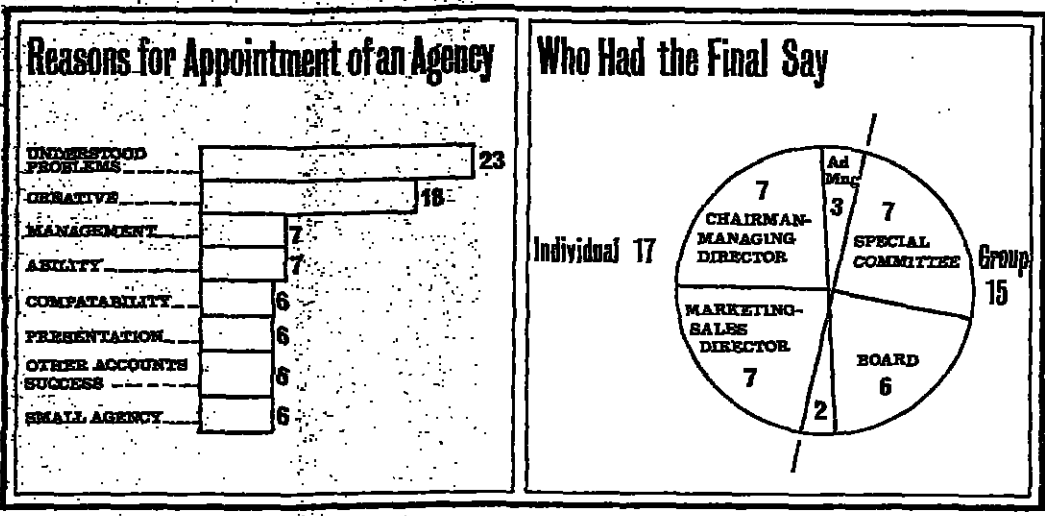
Recent changes
In all, 185 leading advertisers were interviewed of whom nearly a third had changed their agency within the last three years. Over a half of those questioned spent more than £500,000 a year on advertising. The survey concentrated on those companies that had recently changed agencies. It produced the following picture of the reasons for the change.

In the majority of cases a short list of potential agencies was drawn up which usually contained four or five agencies who were interviewed on their own premises. Before short listing an agency it was usual to visit it, and the most important factors in deciding whether to ask them for a presentation were given as the agency's creativity, its experience, the absence of account conflicts, its reputation, size, international links and management. In that order. Of even more real importance was the fact that the agencies visited were already known to the advertiser. No attempt was made to seek out unknown agencies.

When it came to the actual selection the factors were similar to those which motivated short listing the agencies. But under-

standing the people actually producing the ads. Least important of all were the agency's ability to produce new products; its access to below the line facilities; its international connections; and its experience in the advertiser's field.

These findings are perhaps the most interesting. Agencies apparently do not need to provide a wide range of services, or



don to the literature, the agency actually sends out in order to sell itself. It tends to be the impression of the agency which matters.

So it is wise of agencies to produce an aura of creativity about their work and to put themselves talked about. This puts them on the short list. Only then does a marketing expertise become important along with a sympathetic approach to clients' problems.

When the opinions of the companies which had not recently changed agencies were taken into account, the same kind of emphasis remained. The most vital criteria are the ability to produce original creative ideas; sympathy with the clients' problems; and the quality of management. Of middling importance was an agency's use of research; interest in the client at senior agency level; good media department; and access for the

international links, or know the market, or be large. Indeed, while 37 per cent of those advertisers interviewed considered a fairly large agency (in the £5m.-£9m. class) appropriate for their business and 27 per cent preferred an agency billing between £3m.-£5m. only 20 per cent preferred an agency of over £10m. —although if the expenditure was over £500,000 the larger agencies had the edge.

It also appears that companies still like presentations. But these should be related at least in part to the company's problems and not just a general sell for the agency. All in all there was enough of the unexpected in the investigation to make agencies think. The weakness was perhaps the loose use of a vague word—creativity. When advertisers say they are impressed by a particular agency's "creativity" are they not just really saying that they like that agency?

To spice things up the research concluded with questions about the attitude of advertisers towards particular agencies. Lintas now has in its files the images of 11 other top agencies along with its own. This data is, of course, kept locked away, but Gerald de Groot is considering requests from other agencies to have a look. For public consumption Lintas is only releasing a scale of 11 unidentified agencies as they are rated by advertisers for particular skills. The top agency, presum-

NEW PRODUCT DEVELOPMENTS

The ginger flavoured crisp show

BY ANTONY THORNCROFT, MARKETING EDITOR

IT IS difficult to get through a publicise the good news that day without eating something produced by T. Lucas of Bristol or its associate company Spice and Flavour Services which is hidden away in deep country somewhere, near Cirencester. Take a crisp and they probably supplied the flavour, munch a fish finger and it is covered in their processed crumbs. The majority of the sausages consumed are packed with their risk and, more to the point, their seasoning.

Pies, sauces, curried meals, even desserts stand a good chance of containing spices or blends developed at Bristol. And even if you eat steak at an expensive restaurant there is no guarantee these days that a tenderiser has not been injected into the meat and Spice and Flavour produce a great deal of tenderising powder. Not surprisingly the two companies are the most profitable in relation to turnover in the Spillers group—which acquired Lucas in 1949 mainly as an outlet for its flour in risk making.

And the two are perhaps the most confident about the future. Forecasts about the food industry tend to be so predictable that they have become boring. Only flours last week Mr. Alex Alexander, who heads the IMPS food group, was forecasting a 75 per cent expansion in convenience foods over the next five years. It seems equally obvious that the jump in meat prices after entry to the EEC (plus the growing sophistication of palates and the more racially mixed character of the U.K.) will encourage hybrid dishes more distinctive on account of their flavour than the quality of meat in them. (Burgers, curries and continental sausages are obvious examples). And then that old standby, meat flavoured vegetable proteins, probably based initially on the soya bean, will eventually appear. In all these areas Lucas and S and F are deeply committed.

So a visit to the factories takes you to the edge of the brave new world in food development. Of course many of the experiments are secret, but most of the big names in the food industry have experienced a guided tour and tasting and have gone thoughtfully away. For obviously any company with access to soya proteinates and which has wide spread experience in blending flavours has knowledge about the future for foods which no manufacturer can ignore.

As yet no company dares to

One reason, which mainly led to the formation of S & F is that certain processes, especially the refining of peppers are best carried out in the country. Another reason is that the confusing number of companies (for there are even more subsidiaries, in name at least) makes it easier to deal with customers who are often in the same field.

Lucas has, in all, 15,000 customers ranging from Unilever

to a bespoke service. We will make flavours to order. It seems that consumers are developing stronger palates. A burger that Lucas was working on recently had to be spiced up with extra onion. Moriarty is also excited by the future for crumbs. In the U.S. burgers are crumbed—they could be here. Lucas already holds over a half of the £1m.-plus bread crumb market, with a specialist factory sited near the North Sea fish processing industry. Now with crumbed burgers are crumbed—they supplement fish fingers Moriarty sees considerable new demand for this new and more profitable use of Spillers flour.

But the company cannot afford to wait on national trends. Flavouring is now a very competitive business with North American companies invading the market. Recently Lucas has become more entrepreneurial. It has produced a recipe for a honey roasted sausage and it is even backing Miss Honey Roaster to tour the sausage manufacturers and sell them the idea. It is also keeping alive the Black Pudding by producing a mix for northern butchers who might otherwise forsake the dish.

Of much greater significance however is the company's decision to enter the retail field on its own account. This month its sales force will attempt to sell to butchers a Lucas range of accessories for meat dishes, along with the gut and risk for sausages. It will be marketed under the Cornwest brand name and includes a sage and onion mix, a yorkshire pudding mix and a gravy among the initial items. Moriarty feels that butchers have been left behind by the supermarkets as outlets for these products and he banks on Lucas's traditional links with retail butchers to gain distribution. If it takes off cash and carries will probably be the next target.

The difficulty is that a company in a service industry can never slacken up. Flavours date rapidly. Hence the costly research into vegetable proteins. The company needs the successes, the new commissions, to finance the experimental work. And there is always the danger that it will become so committed to a new idea that it will gobble up more than its fair share of resources. But with the undoubted growth in the demand for new flavours, this necessarily secretive company should continue to be one of the hottest performers in the Spillers group.

Maurice Moriarty—supplier to the trade

BKT
for the best in print

All forms of print for shipping, including colour brochures, time-tables, deck plans, menus, and port notes.

BROWN KNIGHT & TRUSCOTT LTD.
Printers & Publishers
11-12 Burg Street, New Ave., London, EC3 4AP. Tel: 01-626 5477.

Captive ladies for ads.

BY SHEILA BLACK

WHAT more captive audience could there be than half a million women all trapped under the hair-dryer? None, according to a couple of young French film producers who are installing in-salon cassette entertainment in 350 hairdressing salons, serving 500,000 women throughout France from next month.

Their features editor is Jeanne Moreau, whose first 80-minute

film has been enthusiastically applauded by the few women who have been given a preview. It features a fashion show; a make-up lesson with detailed demonstrations; a debate on abortion starring Professor Milieu, from a leading Paris hospital; Simone de Beauvoir with members of French Women's Lib; and other subjects appealing to a Nova-type audience.

Future films—there is to be a new one monthly—include literary criticism by Francoise Sagan, gardening, home decoration and even financial scandals. It is all rather like the successful BBC's Woman's Hour, but with colour and vision.

Each long film is split up into short sequences—about ten as a rule. These are interspersed by commercials of anything from 1 to 2 minutes. The size of the viewing screen can be varied according to the size of the salon and some remarkably small premises can be properly equipped. Earphones can be supplied free or, if the hairdresser feels he can get rent for them, hired. And, yes, one can hear under the dryer's hum.

The equipment is leased out at the equivalent of about £18 monthly, with advertising rates based on the hairdresser's taxable turnover. The rates are significantly lower than for "reading magazines."

The film producers are Christian Gion and Jean-Louis Richard. Their address is Les Films du Cercle, 26 Rue Maubeuf, Paris 8. The telephone number is Paris 329 22 03.

SALES

It pays to invest with Southern

The Southerner is affluent. And he's part of a rapidly expanding market. By 1981, according to the Registrar General's Estimates, there will be an extra 700,000 shoppers in the Southern Television Region bringing the total to over 5½ million.

Look at the map and the growth centres in Bournemouth, Poole, South Hampshire, Basingstoke, Ashford, Maidstone, Eastbourne and Hastings. All of them are in the Southern Area. Southern Television has the key to this thriving, growing and spending market. Fifth biggest in the country.

The key is knowledge. Economic, geographic and household data. All available from Southern Television. Our Marketing Services can help you build a bigger share of a market on the move.

SOUTHERN
INDEPENDENT TELEVISION

For further information call John Miall, Sales Director, Southern Television. Tel: 01-834 4404. Southern Television Limited, Glen House, Stag Place, London SW11.

Towns for test marketing

YORK • DARLINGTON
OXFORD • BRADFORD
SWINDON • BARROW
SOUTH SHIELDS • BATH

Each town has a high penetration daily newspaper with full colour facilities. Test your new product. Try out a new campaign. Measure the impact full colour advertising can give you in these test towns. Contact Peter Clifford on 01-353 1030.

Westminster Press
Newspaper House, London, EC4

Your selling career—at a successful standstill?

Why aren't you getting on as far and as fast as you could?

Perhaps you've already achieved everything in your field. Perhaps the industry you're in isn't growing quickly enough. Perhaps you're being held back by an ordinary product or over-cautious management.

Maybe it's a combination of factors—with the result that you're too good for your job.

We'd like to give you the chance to make some real progress in the industry which by 1980 will be one of the world's biggest, and which is already a top money earner for salesmen.

We shall pay you at least the same salary in your first year as you're earning now. Later you'll be on a great deal more.

We'll give you the necessary computer training, and provide you with the benefit of all our experience in the applications of computers to business. If there are any gaps in your understanding of commerce we'll give you whatever insight you require.

Then as manager of your own ICL territory (but always able to call on specialist technical expertise) you'll sell data processing systems at top-management level.

This is where you will need every ounce of your business acumen, plus a high level of creativity. Your product isn't a product in the normal sense. You're selling the benefits that a whole, custom-designed computer configuration can bring to clients' business. You identify a client's needs, and provide the means to meet them.

Naturally, for a job like this, our selection standards are very high. But we sell business efficiency, so we believe in prompt action—like a quick, firm offer—when we meet a salesman who is obviously going to make it.

For an application form, send your name and address (with ref. I 768U on the envelope) to: R. P. Peck, International Computers Limited, Bridge House South, Putney Bridge, London SW6.

Or use the automatic answering service on 01-788 0640.

International Computers ICL

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THURSDAY SEPTEMBER 2 1971

Slow response to reflation

THE NATIONAL Institute of Economic and Social Research concludes its latest economic assessment with the view that the Government has probably now done enough to bring about a general recovery in the economy, but it is still unhappy at certain aspects of the present situation. This is mainly because successive reflationary measures have in the Institute's view been either too small or taken too late. As a result, business confidence has been sapped and investment has turned down—in other words, a stop had already occurred.

Investment lag

It may therefore be some time before economic recovery leads to a substantial upturn in investment. The Institute welcomes the strategy underlying the July package—a fast-acting stimulus to consumption, accompanied by investment incentives which are subject to a time limit—and its forecast of a 4 per cent. rise in gross domestic product between the first half of 1971 and the first half of 1972 is broadly similar to the official estimate. But because the present degree of slack in the economy is greater than in any previous post-war recession, the upturn in investment may lag some considerable way behind the upturn in demand. Indeed, the Institute believes that the main investment response could well be delayed until 1973, although it acknowledges that uncertainty over the possible effects of EEC entry and of the latest world currency developments makes forecasting more than usually hazardous at this stage. In view of this and the present low level of capacity utilisation in industry, the Institute sees little likelihood of any significant reversal of this year's increase in unemployment before the end of 1972.

The Engineering Employers' Federation, which largely draws its membership from the plant and machinery makers, takes much the same view. The Federation's latest annual

economic report to-day puts much of the blame for the present investment recession on cost inflation and the erosion of company profitability. Because of this, it doubts whether the general economic recovery will prove to be as strong as is generally expected, but, in any case, it considers that the demand for investment goods is unlikely to revive until well into 1973 at the earliest.

Regional imbalance

Even so, neither the Engineering Employers' Federation nor the National Institute think that further general reflationary measures are called for, and in this judgment seems correct. Despite the uncertainties in the present situation—in particular those raised by the present re-orientation of exchange rates—any further stimulus would almost inevitably lead to serious overheating by 1973 and thus to another stop. But a general policy of wait and see need not preclude action in specific areas and, as the National Institute itself suggests, one of the priorities now ought to be the unemployment problems of the worst-hit regions.

The Government has already announced some additional measures. But the trouble is that, while for example an increased public works programme may be of assistance in some localities, few measures are likely to be quick-acting. However, unemployment is now a major problem in many areas. Whereas the national proportion of the registered male labour force without work has reached 5 per cent. in Wales and the North West it exceeds 6 per cent. in Scotland and is over 8 per cent. in the North over nine, and in Northern Ireland—admittedly a special case—it is above 10 per cent. Moreover, some of these figures could well become a good deal worse. The situation at UCL is one obvious danger point. Even if little can be done about this immediately, a comprehensive look at regional policies might help to alleviate the situation in future years.

Arab federation against Israel

ALL THAT can be certain about the Federation of Arab Republics is that the people of Egypt, Libya and Syria will give a massive vote of approval in the referendum being held this week to approve the union. In recent weeks President Sadat, Colonel Khedafi and President Assad have all delivered speeches designed to whip up support for the Federation. However, the inevitable majority vote in favour will not necessarily reflect any real grassroots enthusiasm for the union as a practical political measure. As a democratic exercise, this consultation of the electorate by three essentially military regimes will be no different from the popular endorsement given last year in well-organised referenda to President Sadat and President Assad on their succession to power.

In Egypt there has been plenty of evidence since the death of President Nasser of a widespread feeling that national interest should be given precedence over pan-Arab principle in deciding policy. President Nasser's aspirations to lead the Arab world were popular enough so long as they were successful in practice, but the Yemeni adventure and the disastrous brinkmanship which led to the June War of 1967 are now seen by many Egyptians to have been mistakes. It is significant, for instance, that Vice-President Ali Sabri chose the issue of federation to create trouble in the Arab Socialist Union when he embarked on the power struggle against President Sadat in the spring.

Not easy

Colonel Khedafi of Libya is now the most vociferous proponent of Arab unity and has pretensions to take upon himself the mantle which President Nasser once wore. There is little sign, however, that the Libyan people have any genuine wish to integrate with other Arab countries, let alone share their oil wealth, and to most observers they appear almost as xenophobic towards other Arabs as they are towards Europeans. Probably the feeling for Arab unity is most authentic in Syria, but even here the continued

Direct threat

With all these qualifications in mind, it is not surprising that the federal proclamation outlines only an embryonic central government, whose responsibilities initially will be foreign policy, defence, and "questions of peace and war." Nevertheless, it is precisely here that the federation assumes its real significance. In Arab eyes the main rationale behind the federation is that the wider grouping will force Israel to make the diplomatic concessions seen by Cairo and Damascus as the minimum conditions for a Middle East peace settlement. It remains to be seen whether the hopes of Egypt and Syria that Libya's wealth will be available to strengthen their military capability will be fulfilled. But for Israel the stationing of Egyptian aircraft on Syrian territory presents not just an example of Arab co-operation but a direct threat, and an ominous one when the events preceding the June War are recalled. Beyond that, the three countries' enunciation of "no peace, no negotiation, and no compromise over the Palestinian question" do not augur well for the prospects of peace in the region.

West Germany: tests to come for the economic supremo

By MALCOLM RUTHERFORD, Bonn Correspondent, Sept. 1

THE more one looks at the prospects for the West German economy, at any contribution which the Germans might make towards a new international monetary system, or indeed at West German politics generally, the more it comes back to one man: Dr. Karl Augustus Schiller.

Dr. Schiller seems to have powers over the German Cabinet unrivalled since Konrad Adenauer—and Adenauer was Chancellor. Dr. Schiller is Economics Minister, and since the resignation of Herr Alex Moeller last May, also Finance Minister; in other words, he is economic supremo in a country where the conduct of economic policy is perhaps regarded as the paramount political issue.

Guiding the Bundesbank

At present Dr. Schiller is playing the leading role in preparing the 1972 budget and the 1972-75 medium-term economic plans, itself a crucial exercise if the Government is to achieve its promises of domestic reform, plus relatively stable prices and secure employment. He has won almost total control over German monetary policy, having brought the once very independent Bundesbank firmly under his wing. (The Bundesbank president Dr. Karl Klasen, opposed the floating of the D-Mark, but yet has gone along with it under Schiller's guidance.) He is, of course, directing the German campaign for international monetary reform, not only through the IMF, but also, more immediately, through the Common Market. He has shown a readiness, even an eagerness, to stand up to France, which is a most unusual thing in any West German leader.

On top of all this, Dr. Schiller has more than a finger in the Ostpolitik. Over the years he has probably had as much experience of dealing with the eastern countries as any other member of the Cabinet, with the possible exception of Herr Brandt. Just before the Nixon measures were announced, for example, he was in Romania talking to President Ceausescu, almost certainly not only about German-Romanian trade but about a possible new German-China political, Ceausescu having recently returned from Peking.

There is every reason to assume that Dr. Schiller is willingly allowed these powers by the Chancellor. Indeed it is hard to escape the belief that the Government as a whole came to the conclusion some time ago that its only chance of winning the next election in 1973 was by relying on Schiller to produce some kind of miracle of economic management.

That time was probably Sunday, April 25, when the Social Democrats fared surprisingly badly in the State elections in Schleswig-Holstein. The elections coincided with the annual visit to Germany of a team from the IMF, which although it could not say so publicly, came to precisely the same conclusions. Henceforth, the German Government would give absolute priority to restoring price stability (the annual rate of inflation having risen to around 5 per cent.). Where necessary, the team concluded, the Germans would no longer have much hesitation in "putting German interests first." It was just this phrase which was

reform from the last week of April onwards seemed designed to prevent an enormous rush into D-Marks—indeed, the speeches might almost be said to have been intended to encourage it, and there is no doubt whatsoever that this is what they did.

Certainly this was the opinion of the high-level members of the U.S. Administration, Federal Reserve and IMF who gathered in Munich for the international banking conference shortly after the float. Nearly all the American talk was of irresponsible German monetary nationalism. Mr. Connally, the U.S. Secretary of the Treasury, demanded that Germany obey the rules of the

cent. above parity, whereas the intended effect was only 5-6 per cent. to act as a temporary curb on German exports, which had again been rising too fast. The present *de facto* rate of revaluation, however, is admitted by all concerned to pose the danger that some German firms may be priced out of export markets altogether.

Secondly, the Germans have failed to convince the Common Market, or more particularly, France. Dr. Schiller wants—as he has done for months—a collective float of Common Market currencies against the dollar, coupled with a narrowing of their margins of fluctuation against each other. He

Ministry, seems to have brought back much the same message from his talks in Paris on Monday. However long the two sides talk the same basic difference remains: the French insist the D-Mark must return to a fixed parity, and the Germans insist on the collective float.

Thus, German thoughts seem to be turning less to the next meeting of the EEC Finance Ministers on September 13 than to the meeting of the Group of Ten which follows (and for which there is a rehearsal at the deputy level in Paris on Friday). And it is here that one returns to the political power of Dr. Schiller. What if, failing to agree with France, Germany

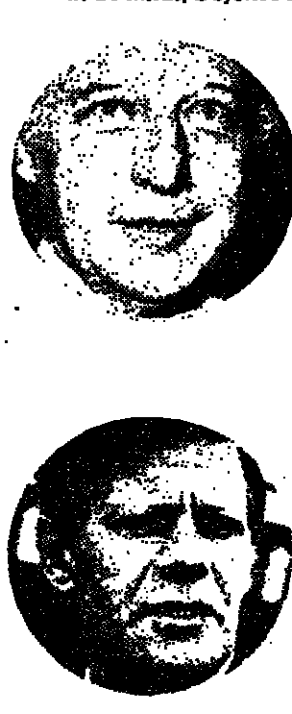
here at least some of his objectives have been achieved. He has bounced back to prominence in a way that would have seemed unthinkable just six months ago. He has stopped the inflow of dollars. He has shown that the Germans can stand up for their own interests when necessary. (Oddly enough, the one German politician of note to have argued in public that there might be something to be said for the French system of two-tier exchange rates, at least if the alternative was a major Franco-German row, is Herr Franz Josef Strauss, generally thought of as the arch nationalist. He has received short shrift even from his own party which, like the Conservative Press, has shown a certain grudging admiration for Schiller's stand.) And as other countries have followed the floating fashion, Dr. Schiller is entitled to argue that although the D-Mark revaluation rate may be 7 or 8 per cent. against the dollar, it is rather less against currencies like the yen or the pound.

There remains the budget now in its final stage of preparation, and the general management of the domestic economy. On the first he seems to be managing at least without provoking the resignations of some of the highest-spending Ministers. The budget will be about 8 per cent. up on the current year. But the record in the wider economic field is more questionable, with, as yet, no noticeable let-up in the rate of inflation. But on both Schiller has an impressive array of weapons at his disposal.

The prime aim

There is a little matter of nearly DM6,000m. (equivalent to about 6 per cent. of the current budget) frozen in the Bundesbank as a result of the repayable surcharge on income and corporation tax. Repayment can begin any time the economy needs priming and must be virtually complete by the time of the 1973 elections. It is not a bad nest-egg and may even be used as a substitute for high wage increases. There is also nearly another DM3,000m. frozen from the current Länder and Federal budgets which can be released. In all probability, both these funds will be mobilised as the German economy turns down. The objective of their creation was stable growth, the post-war German economic aim par excellence. It is just possible that Dr. Schiller, who has added new instruments of his own, will come close to achieving it. The other possibility, of course, is that he will go down seeking to push it. His feet are as the man who unleashed the firmly in Germany and his monetary crisis, and was then unable to solve it.

Centre, Dr. Karl Schiller, Economics and Finance Minister. Left to right, clockwise: Helmut Schmidt, Defence Minister; Walter



Scheel, Foreign Minister; Chancellor Willy Brandt; Ottmar Emminger, vice-president of the Bundesbank; Karl Klasen, president of the Bundesbank.



An eye to re-election

Yet when the Americans finally responded with President Nixon's measures last month their action was the mirror-image of what the Germans had done first. As a result, two of the most economically powerful governments in the world are now pursuing policies of economic and monetary nationalism in the apparent hope of securing their re-election.

Obviously, for the Germans, something misfired. In the first place, the D-Mark floated too high. In the last few weeks it has been at between 7-8 per

game. Others suggested that the only German in this field who could be trusted was Dr. Klasen, who had opposed the floating as far as he could.

used by Herr Brandt when he went on television on May 9 to explain the decision to float the D-Mark.

To be sure, Dr. Schiller and his colleagues had tried to take the rest of the Common Market along with them. They had been as adamant as anyone in the Community in their support for the idea of economic and monetary union, but it was union on Schiller's terms, under which economic union came first; and the Germans insisted that other countries must bring their rates of inflation down to the German level. Otherwise, Germany would be in the old position of importing inflation from abroad and recurrently obliged to revalue.

MEN AND MATTERS

The starlings are no darlings

The attack on the starlings of Bradford begins at dusk tonight. Just after the birds have come back to roost on the city's buildings from their feeding grounds outside Glasgow. In both cities, the initiative came from the Medical Officer of Health, worried about bird droppings breeding insects and forming starting committees to organise action. At the Mechanics' Institute in Bradford, the droppings are several inches thick in places. Haddock expects to go for other city contracts if Bradford is a success. But where do all the starlings go? "That I just don't know."

Nigerian set free

The internationally known economist Dr. Pius Okigbo, one of the most prominent spokesmen for Biafra during the civil war and the man who led Nigeria's negotiations with the EEC in the mid-1960s, has been released from detention in Lagos. Okigbo, a trim, softly-spoken 40 in his late forties, stayed behind in Nigeria when Biafra collapsed 20 months ago, and for a while lived peacefully in his own house in a once-smart suburb of Enugu. But three months after the war he was arrested by police in Enugu, questioned, and finally sent to Lagos, where he languished. It was widely rumoured, in Kiri Kiri prison, the Nigerian playwrite, Wole Soyinka, was at one stage also imprisoned there.

No charges were laid against Okigbo. His arrest was never officially confirmed and his release has come equally unheralded in Lagos. But it will

come as a relief to people who feared that the victorious Nigerians would take vengeance on prominent Biafrans.

As far as is known, only a few army officers remain in jail. The tribunal promised by the Head of State, General Gowon, to look into the activities of men like Okigbo, has never been established and presumably never will be. Okigbo himself is now said to be back in Enugu, by all accounts in good spirits and about to go into business.

Who'll sponsor the Junior Chamber?

The London Junior Chamber of Commerce is desperately looking for a sponsor to help it complete its campaign to attract the International Junior Chamber of Commerce Congress to London in 1973. So far the members of the London Chamber have spent some £2,300 on promoting the merits of London to people as far away as the Argentine and Japan. Most of the money has gone on preparing a 70-page document outlining the possible meeting places and agenda of such a conference, while the rest has gone on "generally waving the British flag" at other International Chamber meetings.

These efforts have narrowed down the opposition from six other towns around the world to one—Nice. But now the campaign is threatened by lack of funds. To win the crown for London, at least two representatives must fly to this year's conference in Honolulu and form the nucleus of the London Junior Chamber. "If we can't go, we are lost," says Dan Daly, president of the London Junior Chamber, "and we will have wasted all the money we have spent."

Another opportunity will not arise until 1984, as all the intervening years have already been bid for by other eager cities. Until two years ago the London Junior Chamber considered London's hotel accommodation to be inadequate to house the influx of 2,000 to 4,000 delegates. But now, with hotels going up all the time, and an undertaking from the London Hilton that it would be prepared to give over its entire conference facilities—it would be the first time they had all been taken by one organisation—the London members feel the time is right.

Already, several institutions like the Stock Exchange have said they would be happy to consider sponsoring events, if the Congress can be persuaded to come to London. But so far, despite many requests, nobody has been prepared to foot the £5,000 bill to sponsor the delegates' presentation in Honolulu.

Dog eats dog?

I see that bus and tram men in Blackpool are to stage a one-day strike on Saturday in protest against the Corporation's refusal to increase bonus payments. The timing of the strike is no doubt influenced by the fact that Saturday is the first week-end of the Blackpool illuminations. But what is more to the point, it is also in effect the first day of the TUC conference being held there, with all the delegates and union officials arriving. I wonder what the delegates from the Transport and General Workers Union, to which the busmen are presumably belong, will think of their brotherly welcome in Blackpool.

Observer

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ECONOMIC VIEWPOINT

BY SAMUEL BRITTAN

Real and bogus costs of EEC entry

WITH THE party conference plausible than it would have been approaching the EEC done as little as a few months ago. But even should govern. It may nevertheless be felt that the public is so saturated with change rates reassert itself, it estimates of the effects of membership will be important to put the membership that any new contribution, volume where it belongs, rather than to the debate must be then onto Common Market unusually interesting if it is to membership. The discussion is receive much attention.

Mr. Miller's estimate of the effects of membership on the real national income is a major factor in the debate. He has shown of dollars, that the EEC will be a net drain on the country. This is particularly valuable because, balance of payments effects are not some kind of on for Schiller's transcendental obstacle to joining the EEC, but simply a joint floating fashion, leading way of listing some of the adverse effects which are much-derived increased price of the dollar, it is a net drain on the country. This is particularly valuable because, balance of payments effects are not some kind of on for Schiller's transcendental obstacle to joining the EEC, but simply a joint floating fashion, leading way of listing some of the adverse effects which are much-derived increased price of the dollar, it is a net drain on the country.

Misleading

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How to convert balance of payments effects into real income costs

	£m. per annum at 1969 prices	
Payments cost implicit in 1971 White Paper		Real income costs
1. Deterioration in manufacturing trade balance	—	—
2. Import saving on food (volume)*	—140	—47
3. Rise in price of imported food	190	238
4. Payment of levies, etc., to EEC	80	100
5. Customs payments to EEC	240	300
6. VAT contribution to EEC Budget	75	94
7. Receipts from EEC expenditures*	—100	—125
8. TOTAL COST	345	560

* Minus signs indicate benefits, as table measures costs. N.B. Signs of payments effects required for this conversion must be direct impact only and exclude all elements of "wage price spiral".

on the terms of trade is expected to add an extra 25 per cent. to the cost of the transfer items. Hence the "multiply by 5/4" in the corresponding section of the table. This 25 per cent is based on the responses to devaluation and price changes implicit in the 1971 White Paper. These are very similar to those which became apparent after the 1967 devaluation and which are generally assumed in international trade studies.

The first two items in the table are the most frequent sources of misunderstanding to those who have been brought up in exclusively balance of payments terms. These two items

pay. But, of course, in order to cure the deficit, exports would have to be increased, or import savings found elsewhere. Others things being equal, this would involve a devaluation or not revaluing when we otherwise might.

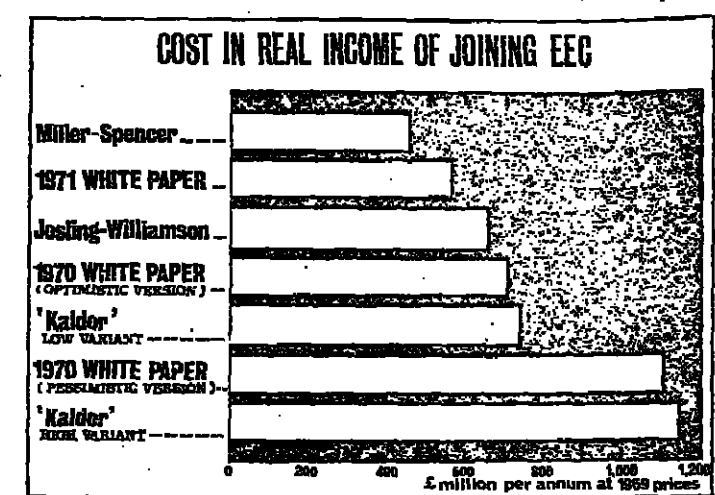
Thus the £200m. gain would be wiped out; and in addition there would be an adverse shift in the terms of trade. This adverse shift would be the only real cost arising from the initial trade balance deterioration. The terms of trade loss would amount to only a fraction of the initial payments deterioration—about 23 per cent. on the assumption already mentioned about international responsiveness to price changes. Hence the "multiply by 5/4" in this section of the table.

The key point in all this is that the crude balance of payments arithmetic slightly understates the real cost of unrequited payments from this country to the Community, but much exaggerates the effects of trade balance changes arising from the operations of the customs union.

Price spiral

In all these computations, only the direct balance of payments effects have been taken into account. No account has been taken of the alleged price-wage spiral, which could result from higher food prices leading to higher wage settlements and thus pushing up British costs. The 1971 White Paper makes no allowance for any such spiral; but it is built into both the 1970 White Paper and the Kaldor estimates; and Miller doctors them both to remove this effect.

He is right to do this. For a price-wage spiral, however undesirable, is not a direct cost



industrial structure or phycho-logical attitudes.

The academic calculations suggest, however, that these purely static gains are very small compared with the costs already discussed. The official estimate also takes no account of the diversion of resources into domestic agriculture because of the EEC's high level of agricultural prices. This is a source of loss and not gain. The marginal reduction of food consumption and switch towards less expensive products, resulting from the new price pattern, is also a source of loss, not taken into account in any balance of payments presentation.

Looking at the whole range of cost estimates, the feature that stands out is that the earlier ones are a good deal higher than the later ones. The most important single source of difference is the assumption made about the gap between EEC food prices and world levels. In early 1970 a gap of around 25 per cent. was normally taken, while the 1971 estimates have tended to narrow the gap to about 15 per cent. Anti-EEC economists tend to assert that the narrowing of this gap reflects temporary shortages in world markets; the pro-EEC school believes that it is more fundamental, and that it will be very difficult for EEC farmers to get their guaranteed prices raised enough in an inflationary world to prevent this

'Insurance'

There is no entirely objective way of saying whether this cost is high or low. They dynamic benefits about which economists can do little more than guess, could be very much greater. On the other hand they are very much a gamble. At least as much weight should be attached to the "insurance" argument which sees EEC membership as a way of minimising the damage from any possible U.S. or world-wide retreat into protectionism. The insurance premium does not seem to me inordinately expensive after all that has happened in the last few weeks.

The prime aim

is a little more than £16,000m. (equivalent to 6 per cent. of the budget) from its share of the total. The aim is to achieve a net gain of £16,000m. (equivalent to 6 per cent. of the budget) from its share of the total. The aim is to achieve a net gain of £16,000m. (equivalent to 6 per cent. of the budget) from its share of the total.

Labour News

First sign of break in Lucas strike

BY PETER CARTWRIGHT, MIDLANDS CORRESPONDENT

FIRST SIGN of a break in the deliberately been exercising restraint in not sending people home or laying them off because of the overtime ban and non-operation.

"But this cannot go on for much longer," a spokesman warned. "The sheer economic strain is getting too much for them. The serious state of affairs that has arisen is not in the interests of the workers or the country."

Workers elsewhere determine their rates by plant bargaining and no one is going to lose by the termination of the agreement. We believe that it is far better to talk about an on-slaught on organised labour.

"What is happening and seems likely to happen can only harm the future prospects of employment in Coventry."

The agreement has been a guideline for both the 80-ones federated engineering companies and also non-federated some of which have been thrown into some confusion by the cancellation.

The union has said it is determined not to negotiate at plant level and may introduce its own rate determination system.

It remains convinced that the agreement removed many areas of conflict with employers and is set against a return to work with comparable skills being paid different rates.

At the same time, it does not wish rates to be frozen at their present level of just over £1 an hour, so the attitude to plant bargaining may soften.

It also maintains that some companies have said they had no voice in the termination of the agreement and are prepared to pay according to the principles of the tool-room agreement.

Back to normal

British Leyland's Austin-Morris car plant at Birmingham is getting back to normal after a strike by 26 engine dispatchers that halted Mini output and caused more than 6,000 other AM workers in Birmingham and at the Swindon body plant to be stood off.

At Swindon, however, 730 workers walked out in protest at 430 others being laid off because of the Birmingham strike. They are expected back today.

Triumph's car factory at Coventry is working as usual after a production hold-up caused by a go-slow by internal delivery drivers.

More widespread disruption among Coventry engineering works is likely to stem from the confrontation between the engineering union and the local engineering employers' association over the ending last month of the 30-year-old agreement between them that fixes the rate of tool-room workers by relation to the average of skilled production workers.

Yardstick

This has in the course of time come to be accepted as a yardstick for many other similarly skilled workers, including those at non-federated companies.

A mass meeting in the city shopping precinct yesterday endorsed the decision to hold selective one-day-a-week strikes and to continue the disruptive non-co-operation and overtime policies that have been enforced for nearly three months.

Mr. Andy Boyle, AUEW district secretary, described the employers' cancellation as the "greatest onslaught ever carried out in the city against organised labour."

"Before they impose a mortal wound on Coventry, we ask them to have second thoughts and to meet us so that we can discuss a return to the tool-room agreement."

This brought a sharp reply from the association. It pointed out that member companies had

ROAD ROLLER MAKER AXES 230 JOBS

REDUNDANCIES and short-time working were announced yesterday by Aveling-Barford, one of the world's largest makers of road rollers, at factories in Grantham, Lincoln, and Newcastle upon Tyne. About 10 per cent of 2,300 workers would be affected, and the company warned more action may be necessary.

A company spokesman said the move was caused by a continued drop in orders.

MINERWORKERS PICKET 'CLOSURE' MEETING

Angry minerworkers picketed a meeting of the Yorkshire Miners' Council at Barnsley yesterday. They were from the NUM branch committee at Manvers Main, South Yorkshire.

The meeting was considering the Coal Board's plan to close the Manvers workshops in January and transfer the 350 men to alternative work at other workshops in the coalfield.

The pickets called for a committee of investigation into the Manvers workshops, and claimed that work being done by private enterprise was being done by the Board's workshops.

BOAC seeks £243 cut in London-Sydney air fare

BY RAY DAFTER

BOAC which has been among airlines pressing for cheap advanced purchase excursion fares on the North Atlantic, is to propose a similar big reduction in fares between Europe and Australia and New Zealand.

At the International Air Transport Association fares conference in Miami starting next Wednesday BOAC will suggest, for example, a return fare of £365 on the London-India-Sydney route, some £243 less than the present economy return fare.

To qualify for this fare passengers would have to book and pay for the ticket at least three months in advance; 25 per cent of the fare would be non-refundable in the event of a passenger being unable to make the journey. The airline is taking a flexible attitude towards the length of advance purchase, however.

Other proposals

Qantas, the Australian airline, is proposing a £396 round-trip advanced purchase fare which would have to be booked three months before departure while Pan American has a proposal for a £375 Sydney-Europe return fare, bookable six months in advance.

BOAC will point out that it is imperative that scheduled airlines should have a cheap fare to combat the growing use of charter operations on the routes. At present passengers can fly at cheap charter rates between Europe and Singapore, combining this journey with a scheduled carrier flight for the remaining leg to Australia or New Zealand.

Group fares

The object of cheap fares is to attract more passengers on to scheduled aircraft to fill seats which would otherwise be empty. In order to offset cost increases and the effects of the recent monetary changes, the conference may well decide to increase normal scheduled fares on European routes, however. Increases of between 5 per cent and 10 per cent are being requested by many European airlines.

Air France, looking to the potential of the tourist and convention market from Europe to Japan, is proposing an incentive group return fare on the route for at least 20 passengers equal to the one-way economy class fare (at present £283.10 for London-Tokyo).

BOAC is expected to point out that the carriage of groups to India and Pakistan represents a considerable volume of business in the U.K.—worth about £2m. a year. In order to compete with the increasing operations of non-IATA charter and affinity group charters the airline is proposing a new affinity group fare between London-Europe and Karachi, Bombay or Delhi at a 60 per cent discount off the scheduled fare. Such a fare would be applicable to groups of 15 or more.

Lufthansa in talks on N. Atlantic fares next week

BY RAY DAFTER

THE INTERNATIONAL AIR Transport Association is expected to convene a meeting of airline executives next week, possibly on Friday, September 10, in an attempt at agreement with Lufthansa over a North Atlantic air fares package.

LATA has extended to September 15 the deadline—due to expire yesterday—for Lufthansa to decide whether it will join the other airlines in accepting the generally agreed package. As reported in the Financial Times yesterday, the West German Government has not yet agreed to Lufthansa's proposals to go it alone with a cheap fare plan.

Airlines are anxious that this should not be an open-rate situation on the North Atlantic, and this deadline extension, which was widely expected, allows for further discussions.

Lufthansa has said it plans to stand firm in rejecting the package in favour of its own proposed cheaper fares, but it is clear that the airline is coming under increasing pressure from other carriers, and possibly the West German Government, to reach some form of compromise.

The extension means that further discussions can also be held among the airlines attending the Miami fares conference starting on Wednesday. If Lufthansa continues to veto the North Atlantic agreement, there seems little alternative to an open rate situation.

Private house building hope of best year since 1968

BY MICHAEL CASSELL

BUILDERS are now expecting the current year to be the best for private housing activity since 1968 according to an inquiry conducted by the Department of the Environment.

It shows that the industry foresees starts in the private housing sector amounting to around 195,000 this year—20,000 more than predicted for 1971 at the end of last year.

Encouraging

The latest forecast, although considerably more encouraging than that of last November, represents a minor downward revision of the last inquiry in April. At that time, the builders expected starts of 200,000—the actual figure achieved in 1968—but this may have proved to be just a little too optimistic.

Until the end of July, builders had started work on just over 112,000 private homes, an average of 16,000 houses for each month of this year. If this average is projected for the remainder of the year, starts for 1971 should amount to something in the region of the 195,000 now being estimated by the builders.

However, given one or two more excellent months for private housing activity—July proved to be one of the best on record in recent years with 19,800 starts—200,000 for the year could well be a possibility.

This figure would compare with 165,000 in the private sector during 1970 and 166,000 in the year before that.

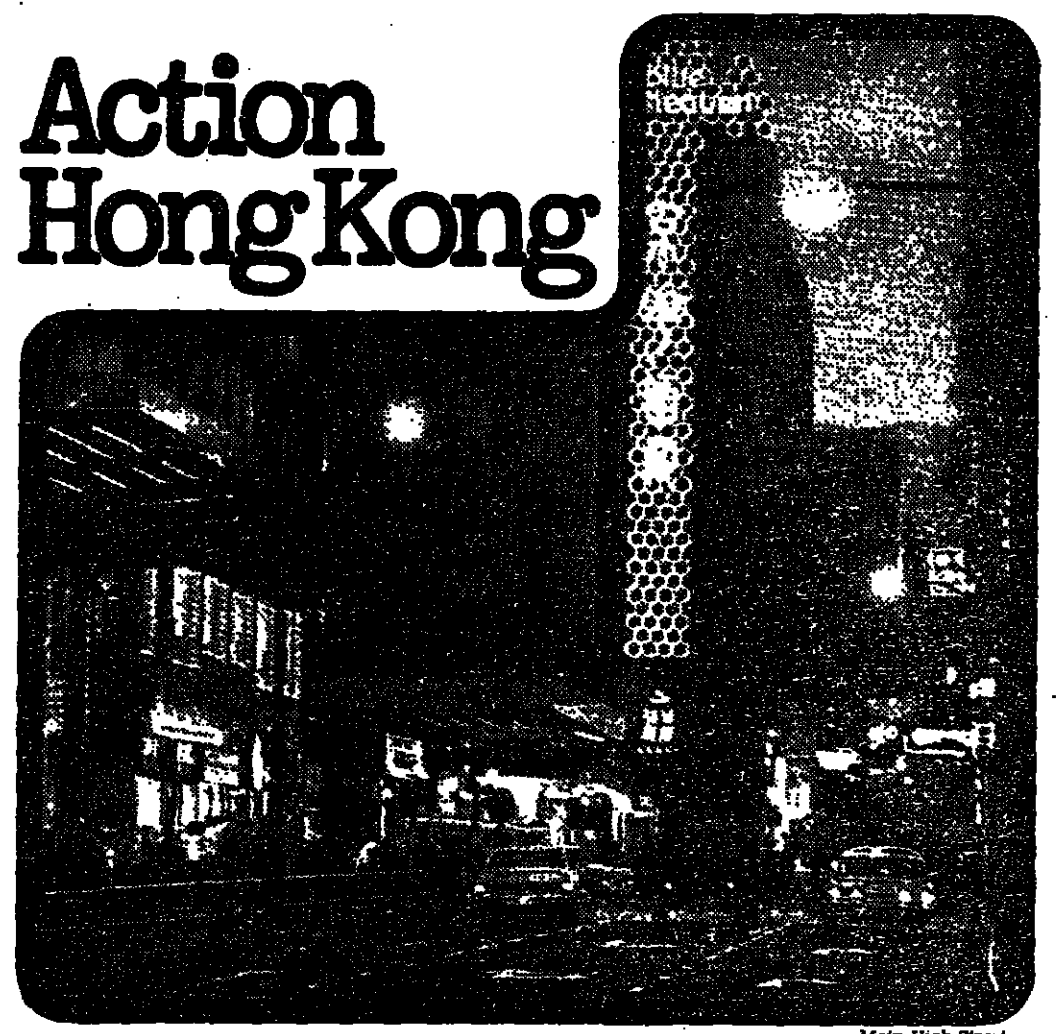
Builders had completed just over 183,000 private homes by the end of July, a monthly average of a little under 15,000. A similar performance for the remainder of the year, should make the total figure nearly 180,000 houses. This would compare with 170,000 last year, 182,000 in 1969 and 222,000 in 1968.

The outlook for council house construction is by no means as clear, with activity varying considerably from month to month. One fact is quite apparent; that the number of starts and completions is going to be considerably below the level expected by the industry's Economic Development Committee when they reported on prospects at the beginning of the year.

More London one-man buses

BY HAROLD BOLTER, INDUSTRIAL CORRESPONDENT

LONDON TRANSPORT has placed orders worth £18.5m. for 1,800 more "Londoneer" double-decker one-man buses. The 1,800 buses, ordered with The 1,800 buses, ordered with Greater London Council approval, will again have the Leyland Daimler "Fleetline" chassis. Nearly half will be equipped with Gardner diesel engines, as on the Transport plan to put 1,967 of first Londoners, and the others will have Leyland diesels. Two companies are building the bodies. Park Royal Vehicles, of London, a British Leyland company making the 367 bodies already ordered, has received an order for 880 more at a cost of about £5.5m.



Biggest boom in the smallest area. Find out about your opportunities with the Hongkong Bank Group.

Hong Kong offers the most astonishing economic story in the world. A minute colony with no raw materials to speak of, an obvious shortage of land, and a population that has more than doubled in the last twenty years. Yet their budgets have been in surplus for most of the last decade. Per capita income is second only to Japan in Asia.

Industrialisation is just over 20 years old and is expanding rapidly. The opportunities for foreign companies are there. By the end of 1970 there were 696 foreign companies registered in Hong Kong.

Have you looked at your company's prospects in the Colony? The Hongkong Bank Group can offer the authoritative and expert advice that you will need in this and 35 other countries. A 16 page booklet has been prepared, summarising the economic conditions in the island. Send for a free copy now—and be briefed by the experts.

THE HONGKONG BANK GROUP

9 Gracechurch Street, London EC3V 0DU

حِكْمَةُ مَنْ الْأَحْمِلِ

Zamanglo final

A FINAL dividend of 15p is declared for the year to June 30 by the Bermuda-based Zamanglo Anglo American. Broadly in line with expectations, it follows an interim of 25p and a special payment of 12 1/2p; the latter reflected the company's receipt of high terminal dividends from the Zamanglo copper mines which are now 51 per cent owned by the Zamanglo Government.

Zamanglo's net profit for the past year comes out at £13.9m. and is not comparable with earnings of the international

Existing loan resources, which are instant plus repayments from the redemption of loans in stock held in Zambia Copper Investments, are to be utilised for furthering Zamanlo's new career as an international mining company. The price surge suggests that the current year's total repayment will be less than 40%, but this is allowed for in the yield of over 18 per cent. at Z220p.

The company with its fooding stock has an interesting growth complicity.

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and for imagination. "The biological change," he said, had been the main-
stay of economic and social progress over the past two cen-
turies and remained the chief
source of increasing affluence
for the time being. Techni-
cal innovation was a major
source of economic growth had
been an object of conscious
government policy.
"I am accused, however, those
of us at our faith in science as
the source of economic advance-
ment, of exaggerating the part played
by the "body" of formulated
"science" in the generation of
"biological" change. They
estimated, said Sir Alec,
the importance of unformulated
"science," of skill, born of
experience, of intuition, of
inspiration in grappling with the
question of inventiveness and
creation in design."
"Scientific knowledge," he said,

INTERIM STATEMENTS

UN ALLIANCE LONDON

INSURANCE GROUP



INTERIM STATEMENT

END

The Directors have declared an interim dividend of 8% on the capital of £36,715,847 as increased by the final conversion of stock on the 1st January 1971 which is to be paid, less income on the 8th January 1972, costing £2,937,000.

For last year interim and final dividends of 7½% and 9% were issued capital of £34,996,370, making a total of 16½%.

ESTATED HALF-YEAR RESULTS

	6 months to 30th June 1971	6 months to 30th June 1970	Year 1970/1
Accident and Marine	£900	£900	£900
Insurance Income	88,459	78,013	159,176
Writing Surplus: Fire	2,093	399	474
Accident and Marine	326	319	650
Insurance Profits	6,025	5,835	11,705
Income	20	41	169
Stock Interest	5,493	5,496	12,938
Before Taxation	2,900	1,400	4,136
Minority Shareholders	145	28	Cr. 18
Profit	5,388	3,787	8,256

again emphasized that estimated half-year's results cannot be taken as a guide to a full year's results.

AND ACCIDENT DEPARTMENTS

results from most of the important territories, with the United Kingdom and Canada, have been better although, in the United Kingdom, motor business is still not profitable. In the United States a useful underwriting profit has been earned.

INSURANCE DEPARTMENT

1968 Account, which will be closed at the end of this year, showing a better profit.

ACCIDENT DEPARTMENT

expansion of income has continued but, as forecast, at a somewhat below the exceptional increase recorded in 1970.

INSURANCE DEPARTMENT

and Annuity Business:

	6 months to 30th June 1971	6 months to 30th June 1970	Year 1970
£'000	£'000	£'000	£'000
Business Assured	142,661	132,784	358,229
Quantities per annum	1,658	1,178	2,460
Annual Premiums	1,632	1,629	3,640
Single Premiums	1,736	750	2,544

THE LEONARD FAIRCLOUGH GROUP OF COMPANIES

CONSOLIDATED PROFIT AND LOSS ACCOUNT

	6 months ended 30th June, 1971	6 months ended 30th June, 1970
	£	£
Profit before Taxation	764,376	510,500
Less: Taxation and charging:		
Depreciation	265,983	147,691
Directors' Emoluments	45,043	38,339
	312,026	184,030
Profit (Note 1)	305,750	216,963
Less: Taxation	458,626	293,537
Profit	121%	20%
Dividend	121%	20%
Notes: (1) The charge for Taxation is estimated and based on Corporation Tax at 40% (1970-43%).		
(2) The figures for 1971 have not been audited.		

approval of a recent agreement were unanimously

ing for advocated

forced to seek the maximum cash fees obtainable owing to remoteness of profits," the report declares.

The process could be reversed if top stars were paid through a share of the distributor's gross receipts. "When the astronomical fees disappear there will be every reason for other fees to descend to a saner level and for out-date crewing and other practices to be modified," the Corporation claims.

At a London Press conference, Mr. John Terry, NFFC managing director, drew attention to the film "Under Milk Wood" for

some "encouraging noise" the international market. British films remained in the limbo.

In June, the Government announced that up would be available to private on condition that the provided money on a one basis.

Should moves to set a sortium fail, Mr. Terry would mean the end of NFFC. That would be blow to the British film but would not entail its The annual report said is a good prospect that sortium will prove to be

which Mr. and Peter O'Toole had given their services free in return for a share of profits.

Such a system reduced the initial cost of film finance and rewarded artists over a period of years, thereby lightening their tax burden, Mr. Terry said.

He was hopeful that by the end of the year the Corporation would have set up a consortium to inject private capital into the film industry.

A prospectus for the consortium would be released "within the next week or so" but unless a minimum fund of £3m. was established the venture would not be worthwhile. "Personally I would want much like to see this doubled or even trebled," Mr. Terry declared. "If we can get it up to £10m. then I think we could really do something."

Pressed to forecast the prospect of success in the Corporation's bid to raise private capital, Mr. Terry would go no further than to say he was "reasonably hopeful." The NFFC had heard

able. "It will, however, be apparent that the police consortium will have strict commercial aims, and any ideas still current in film industry that the nation has certain obligations of a wider commercial nature must be abandoned."

The report does note that the consortium will seek to "highlight the technical merit which is the international respect for film-makers."

Aggregate receipts during the year—including shares of £122,116 from films — amounting to £218,739; and provision for losses on including interest due on amounting to £218,739; and expenses of £78,427; and payable of £199,786. A £204,786 was incurred.

National Film Finance Corporation, annual report statement of accounts for Cmusd. 4761; SO, 15p.

PHILBLACK LIMITED

The Thirty-Fifth Annual General Meeting of Philblack will be held on September 23, 1971, in London.

The following is the statement by the Chairman, Mr. G. Walker, which has been circulated with the Report Accounts for the year ended March 31, 1971:

It is with great pleasure that we welcome to the Mr. R. M. Simpson who was appointed on the 23rd February. He has been with the Company since 1966 and has appointments of Assistant Works Manager and Works Inspector and is now the Bristol General Manager.

I have to report a year of considerable difficulty and respects. The problems which face the car industry, and more the tyre industry, to which I referred last year, continued and accentuated during 1970-71, thus making demand for our products substantially less than we had anticipated. Nevertheless, the turnover was increased by nearly £300,000, this was in real terms as the volume demand increased which was mostly in the export market.

Trading Conditions

On the 1st January prices were increased by between 5 and 10%, but I am afraid that this is not sufficient to cover the increase in costs which has occurred both before and since that time. We have had to meet heavy increases in costs of raw materials.

also have experienced some unexpected difficulties in the situation. These were brought about by the Middle East oil by the U.S.A. air pollution requirements and by the cost of tanker storage. Finally, there was a serious explosion at the refinery of one of our suppliers, which necessitated our cancelling the lost shipment with a very much more expensive fuel from the west coast of the United States. This latter increased our raw material costs by some £126,000. Fortunately this was a once for all increase but, on the other hand, fuel oil prices have almost doubled from August, 1970, to the present time. These increases have been met by the necessary sequential increases in carbon black feedstock costs. However, satisfied that the arrangements which we have made will enable us to purchase our raw materials at a reasonable price, and following the expiry of our tanker charter, we have entered into a new one which will ensure reasonable charges over the next three to four years.

Development Programme Completed

Capital expenditure during the year was nearly £500,000. This allowed us to complete our development programme at Avonmouth plant and to make modifications to meet the increasing changes in technology. We have also installed a reactor which enables us to produce carbon black of smaller particle size. The advantages of this development have been fully exploited. We have introduced the use of natural gas as a fuel from the 1st May, giving us both cost and a cleaner product.

Debtenture Stock Issue

In November, with the help of our advisers, we issued £1,500,000 in the form of a 11% Debtenture Stock, and I am doubly glad that the period when British industry has been facing problems, this arrangement is very much to the benefit of your Company and enables us to pursue our plans for expansion which would not otherwise have been the case.

Current Outlook

The immediate problems which face the industry are (a) the current generally slow economic growth of the country (b) the excessive rise in costs as instanced by an increase of nearly 25% in raw material prices since January of this year (c) excess capacity in the United Kingdom, which will be aggravated by another large carbon black plant coming into operation in a few months' time.

These problems are serious although not exceptional for the industry as a whole. On the other hand our ability to meet them is being severely tested. Beyond our ability to meet the substantial cost increases which are beyond our control, the higher selling prices, enabling us to regain the profit which we have experienced in recent years may be delayed. In spite of all these difficulties to which I have referred, your Company is well placed to take advantage of a resurgence of trading activity in the car and tyre industries and, I am confident, this in mind and having regard to the non-recurring nature of at least one of the cost factors to which I have referred, your Board has decided to recommend the maintenance of the present dividend.

Finally, I am sure you will all join me in a word of appreciation to a fine team which has worked extremely well in less than easy circumstances.

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Mr. H. Peter Jost

Central, a director of Williams
Houston, chairman of Bright
Brabine, and of Pepper Mill Brass
Foundry.

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Mr. J. E. Clark has been
appointed deputy general man-
ager for the U.K. of the MANU-
FACTURERS LIFE INSURANCE
COMPANY.

*
Mr. R. E. Hurst, deputy chair-

the U.K. and French
Mr. W. H. Gosselin
up a new associa-
in Canada.

Mr. C. J. W.
from executive vice
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PARKINSON after
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Parkinson and his
to represent J.
Electric on the
and Allied Manu-
tion council.

Following the
Haden and Son
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is now HADEN
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The Board will
Mr. F. A. Pullings
J. A. E. Heard, I.
W. D. J. Brann
Jenkins, Mr. M.
J. Nicholls, Mr.
J. R. Potts, Mr.
A. H. Young. 3
been appointed
Chair Engineer,
Mr. W. B. R. Cro-

man of the Dowty Group, has additionally been appointed chairman of DOWTY FLY SYSTEMS, succeeding Sir George Dowty, who remains a director of that company. Mr. N. H. Fayat, managing director of Dowty Fly Systems, becomes deputy chairman.

★

Dr. C. G. Coggan has been appointed a director of the CUMULUS INVESTMENT TRUST.

★

Mr. B. Boxall has ceased to be a director of LINDSTRIPS on reaching normal retirement age.

★

To devote more of his time to the affairs of Wolsley-Hughes, of which he is deputy chairman and joint managing director, Mr. E. F. C. Newsom has retired as managing director of its subsidiary MUYRY HEATING PLANTS and Mr. W. J. O. Bartlett and Mr. G. A. Foster have been appointed joint managing directors. Mr. Newsom will continue as chairman of the company.

★

Mr. A. Campbell Bate has been appointed managing director and chief executive of GRAY DAVES AND CO. (Incepshe and Co.).

★

Mr. J. H. Moore, of London, Ontario, has joined the Board of HUDSON'S BAY COMPANY.

Mr. Moore is president of Brascan and chairman of John Labatt.

★

Mr. Michael Heppner has been appointed to the Board of JOHN PLAYER AND SONS as marketing and sales director.

★

Mr. F. I. Geddes has resigned from the Board of HALTHERMOTANK to reduce his business commitments.

★

Mr. David Hay and Mr. John E. Henderson, assistant manager of the assistants, Mr. James Macpherson, premises and development manager, are to become assistant general managers of the CLYDESDALE BANK from October 1. Mr. William R. Smith, formerly of Piccadilly Circus, London, branch, is to be a general manager's assistant from that date.

★

The offer by J. Wagg and Co. to share capital of & CO. having financial changes has been accepted by Mr. R. Weeks, company and has managing director. A. R. Willett was Mr. B. Knapp, managing director, appointed to the directors of Schell L. Fletcher, Mr. R. R. M. Orr, Board, Mr. P. Phillips, chairmen of the company who will continue with Mr. E. A. Kahn, director, has resigned.

★

Mr. F. T. Hart, finance and controller, Mr. F. Wilder, marketing and design, at their Board of RUSSCO, October 31, to assist the consultative capacity.

★

Mr. H. J. A. general manager of Insurance Company, a director of EX SERVICE.

★

Mr. Robert Watt, been appointed new ATLAS PRIVATE. He is Grenard, who formerly has asked to managing director of the group's area representative East), has Kneeshaw as Managing Director Atlas Copco (Pumps).

★

Mr. Julian Williams of the Cornwall has been appointed director on the local Regional Bank BANK.

Mr. J. J. Ryan-Bell, commercial director of **CRANES' SCREW (HOLDINGS)**, has assigned as his director to devote himself to his other business interests. Mr. H. F. Dunkley, the managing director of the group plastics division, **MORNING (CROYDON)**, has retired from the Board but will be available as a consultant.

Mr. John Thistlethwaite has been appointed secretary of **PENNINE MOTOR GROUP**, in place of Mr. W. A. Rising, who has resigned.

Mr. R. F. Bradley has been appointed general manager of **GULF OIL (GREAT BRITAIN)** and area director—marketing for the U.K. and Ireland.

Mr. Brian has been appointed technical S. COLLIER and previously produced **Frame Clothing**.

Mr. Richard E. has been appointed managing director of **GENIE LIMITED**, successor to G. Chamberlain, who had domestic sales in Motors.

STOCK EXCHANGE

PARTNERS

Mr. Harold A. has been admitted to the **KITCAT** AND **AT**

World's biggest dish new radiotelescope

BY DAVID HSHLOCK, SCIENCE EDITOR

THE GOVERNMENT has approved the next step towards construction of a new radiotelescope, substantially bigger than Jodrell Bank's present instrument.

A detailed design for a radiotelescope with a dish 375 feet in diameter, compared with the existing 280-ft. dish, is to be completed at a cost of £250,000, says the Science Research Council announced last night.

It will lead to simultaneous consideration of tenders for the construction of all major components in about a year's time. The instrument, known as the Mark VA, located at Meiford in Montgomeryshire, will be operated by remote control from the Nuffield Radio Astronomy Laboratory of the University of Manchester, at Jodrell Bank, under the direction of Sir Bernard Lovell. It is expected to cost upwards of £3m.

Husband and Co. are the consulting engineers, and the U.K. Atomic Energy Authority's en-

gineering division, acting as the Science Council's agents.

The specification is fully steerable in azimuth and elevation, centimetres, that in co-operation with Mark I radiotelescope—the world's largest—be carried on a 1,000-ton, supported mounted on a relatively turntable.

The Mark I, at Jodrell Bank, recently claims to be the fully steerable in new 100-metre dish near Bonn.

REDLAND

Redland points man associate, a 100-toning in Schildkröt of Mannheim, from

and. He replaces a man who has taken command with Gulf

★ Scott has returned to his duties as a member of the CROMPTON company. He will be more than 40 years of age. He was of Crompton has been appointed as the new manager of the British Electrical Manufacturers Association.

★ The new member of G. N. Smith and Carrier title of the group CARRIER. All subsidiaries will have their present

★ The new consist of: Mr. R. G. Holden, Mr. L. A. W. R. T. Lowth, Mr. G. E. Mills, Mr. H. Mills and Mr. H. Hoff has also been added to the Board of Directors in place of Mr. J. Haden, who

Mechanical Services

In this division, Calefaction, Calair air conditioning (Nottingham) provide complete maintenance facilities in all aspects of conditioning, plumbing and refrigeration, services such as sprinklers, compressed systems, chemical and steam pipework.

The division had a successful year. Orders completed this year, together with sales into year's sales.

Electrical

Consisting of Cain & Co, Calthorpe Electric, the electrical division offers a contracting service for shops, hotels, schools, industry in general, together with street light highways.

This division is now well established for its sales to date and orders in hand for complete last year's sales.

Signs

With sales last year at a record level, Brilliant is positioned as a leader in the manufacture of illuminated and non-illuminated signs in addition of City Display and C.D. Sign contributed well to the profits of the Group. The division this year already exceed last year's division to further increase its profits con-

end of this year, continues as vice-managing director of engineering, and Mr. A. S. is managing *Chiffre Carrier*, the engineering subsidiary of *ings*.

* **Henry Schroder** is the outstanding G. D. PETERS become unconditional following Board meetings has joined the company has been appointed in or place of Mr. who has resigned. The production company has been a Board. Three *roder Wazg*, Mr. P. A. Grant and have joined the *etches*, becoming *ie of Mr. W. Ryde* as a director. *ayan*, marketing assigned from the

* **land**, director of corporate planning, **more**, director of planning, will request, from the *ON-BUCKYRU*, on company will continue a company in a city.

* **Harbour**, joint of the *agle Star* company, has become **PORT PACKING**

* **Kneeshaw** has been resigning director of *OPCO* (INDIA) replaces Mr. *Alala* personal reasons be released as *ir*.

* **Larson**, the representative (Far succeeded Mr. *aging director of* (Philippines) Inc.

* **iams**, a member County Council, ended a regional *Devon and Corn-* of LLOYDS

Shop Equipment

We formed *Sageway Limited* to manufacture shelving, gondolas, automatic *department store fittings*. Sales to date *line with forecast*, and whilst we are *in improving our plant and extending our division should progressively improve its profits*.

Light Engineering

We put together *Kleenfit of Nottingham* (manufacturers of air conditioning equipment) of *Southampton*, manufacturers of *finned coil heating*, to produce all the hardware needed and refrigeration, right through to *fully air plant rooms capable of filtering, humidifying, treatment of air for hospitals including optories, factories, offices and shopping centres* so on. With increased sales the division is worldwide growth in the demand for *conditioning*.

Common Market

Frederick Sage & Co. (Belgium), established in Brussels, has modernised and refitted *plant* most of the equipment belonging to both British and This well-established business is already *springboard for other Sprecley companies* Common Market, as well as helping *Sprecley* expand into Europe.

The Future

More than ever the Nation is conscious of its environment. A major part of our work in companies is devoted to improving the *people live, work and shop*. For example, we conditioning on a large scale and for *pollution*. Our fitting out of offices, shops, and tourist facilities, in consultation with *a for more pleasant and efficient surroundings*

Orders in hand due to be executed during *orders already completed*, add up to £8m. This is well distributed over the seven divisions *capacity and planned growth*. These end reflect, I believe, the confidence of both in *our endeavours*.

Sales

Group Trading profit

Taxation

Total dividends less amounts waived

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D. CO. He was
manager of

Pugsley has been
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RAL MOTORS
ading Mr. Harold
who has become
manager, Vauxhall

**EXCHANGE
SHIPS**

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WRIGHT

The Annual General Meeting of F. WRIGHT (ASSOCIATED COMPANIES) LIMITED, September 1 in London.

The following are highlights from the statement of the Chairman and Managing Director, Mr. W. E. Wrighton:

- * The second half of the year showed a continued increase in sales and the results for the full period reflect a trading which is only slightly down on the achievement for the year ended 31st March 1977.
- * The trading profit of £378,228 compares with £370,000 for the corresponding year. A dividend of 15% is recommended.
- * The decision was taken during the first half of the year to increase the commitments in the manufacture of reprographics at the new factory at Broxbourne and to allocate the cost of the increasing demand for our new range of kitchen units and the new ADAM range of furniture in DECPOL polyester. This changeover will be a considerable contribution to the profitability of the company.
- * Production at the main factory now consists of 100% of the domestic market and the medium range of the last few years is continuing to bring in substantial manufacturing costs and additional order processing are being installed.
- * Sales for the three months to 30th June, 1978, were £1,097,371, an increase of 10.1% on the corresponding three months of 1977. In the year to date, many unforeseen developments we look forward to the year to returning to a state of record production.

GROUP FINANCIAL STATISTICS:

	Year ended 30th June
Turnover	1977 £3,346,750
Profit before Taxation	241,200
Ordinary Dividend (gross)	45,000
Profits retained	101,121
Issued Share Capital and Reserves	1,097,371

and County Air Con-
densing, installation, heating, ventilation, air together with factory air and hydraulic oil
is now on hand due to be
ordered to date exceed last

Electrical and C.D.
a complete nationwide
hospitals, offices and
mounting on motorways and
further expansion, having
this year in excess of

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and installation of both
and fascias. With the
devices, this division has
up. Orders on hand for
's and we are expecting
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facture and install self-check-out counters and orders on hand are incurring considerable costs in a range of products, the contribution to Group

(since moved to Gosport), Rent and Custom Coils coils for refrigeration and ded for air conditioning. Automated pre-fabricated heating, cooling and generating theatres, laboratories, computer rooms and taking advantage of the refrigeration and air

hed over fifty years ago ny hundreds of premises and European companies. oving itself a ready-made s seeking outlets in the kley's own customers to

and concerned about its the Spreckley group of conditions under which we are responsible for apparatus to prevent air hotels and recreational architects, makes directly s.

g the year, together with his level of new business ons in relation to their couraging order books ndustry and architects in

Year to	
31st March 1977	
£4,868,099	
£467,863	
£172,862	
(24%)	£86,342

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HIGHTON & SONS
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record figures
1970.

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(14%).

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971 are in excess of
last year. Subject to
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profitability.

S

ended 31st March

1	1970
3	£2,964,803
2	270,400
0	42,000
5	85,125
6	995,489

GENERAL APPOINTMENTS

FINANCIAL AND ACCOUNTANCY APPOINTMENTS APPEAR TODAY ON PAGE 7

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- A PRE-EMINENT international book publishing organisation is to appoint a chief executive to control the affairs of its subsidiary company covering East and West Africa.
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to P. A. R. Lindsay as adviser to the company.

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Analysts are required for the Investment Branch of the National Coal Board—which deals with the Board's Superannuation Funds—and is located in Chancery Lane.

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Full details should be submitted to the Headquarters Staff Manager (X5799), Hobart House, Grosvenor Place, London SW1X 7AE.

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The MSL Consultant has analysed this appointment

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 - AGE 40-50. Terms will be attractive to men already earning at least £6,000 p.a.
- Write in complete confidence
to Dr. R. F. Tuckett as adviser to the group.

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PRODUCTION CAPACITY

Accordably, on or after October 1, 1971, the Debentures, or portions thereof, so designated for redemption will become due and available for redemption in the United States at the office of Bankers Trust Company, Corporate Trust Division, 1 Battery Park Plaza, New York, N.Y. 10005, or at the office of the holder, in England at the office of the Bankers Trust Company, 15, Abchurch Lane, London, E.C. 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

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The applicant must be a fluent German speaker and have a good knowledge of international stock markets. He should have worked for an Investment Bank or Stockbroker. He must be willing to travel in Europe and able to discuss with institutional clients all matters of interest in various stock markets with particular reference to the U.K.

The vacancy must be filled immediately and no one should apply who is unable to start before the end of December. The salary will be not less than £5,000 with excellent prospects for rapid promotion.

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COMPANY NOTICES

NOTICE OF REDEMPTION To the Holders of

The Flitkote Company

4 1/2% Debentures dated October 1, 1960

NOTICE IS HEREBY GIVEN that pursuant to the provisions of Article Three of the Memorandum and Articles of Association of the Flitkote Company, the Company has resolved to redeem the 4 1/2% Debentures on or after October 1, 1971 at the principal amount thereof plus interest accrued to the redemption date, £147,000, principal amount of the 4 1/2% Debentures due 1980 bearing the following numbers:

Coupon Debentures of £1,000, denomination

M 10 517	857 1098 1302 1509 1755 2118
11 576	859 1108 1322 1510 1758 2135
16 580	857 1132 1353 1517 1757 2145
17 674	945 1134 1388 1530 1758 2179
20 675	950 1136 1390 1578 1800 2205
240 584	978 1145 1405 1620 1802 2208
242 724	989 1156 1410 1622 1859 2274
347 725	992 1156 1424 1641 1912 2279
349 733	995 1232 1445 1671 1933 2293
353 745	996 1233 1456 1704 1954 2318
354 753	998 1234 1458 1706 1956 2320
358 797	1044 1259 1480 1713 2001 2411
358 825	1045 1258 1498 1748 2057 2442
400 1001	1052 1268 1508 1768 2105 2460
457 856	1065 1281 1507 1742 2108 2481

Fully Registered Debentures called for redemption in whole or in part

Fully Registered Debentures	Number	Denomination	Amount Called
R-36	1,000	\$1,000	1,000
R-66	1,000	1,000	1,000
R-68	1,000	1,000	1,000
R-78	1,000	1,000	1,000
R-80	1,000	1,000	1,000
R-85	1,000	1,000	1,000
R-86	1,000	1,000	1,000
R-87	1,000	1,000	1,000
R-107	1,000	1,000	1,000
R-108	1,000	1,000	1,000
R-109	5,000	1,000	5,000
R-110	1,000	1,000	1,000
R-111	1,000	1,000	1,000
R-112	2,000	1,000	2,000
R-113	4,000	1,000	4,000
R-118	2,000	1,000	2,000
R-119	2,000	1,000	2,000
R-120	5,000	2,000	10,000
R-121	10,000	2,000	20,000
R-122	5,000	2,000	10,000
R-123	1,000	1,000	1,000
R-124	4,000	2,000	8,000

Accordably, on or after October 1, 1971, the Debentures, or portions thereof, so designated for redemption will become due and available for redemption in the United States at the office of Bankers Trust Company, Corporate Trust Division, 1 Battery Park Plaza, New York, N.Y. 10005, or at the office of the holder, in England at the office of the Bankers Trust Company, 15, Abchurch Lane, London, E.C. 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

On and after October 1, 1971, interest shall cease to accrue on said Debentures, or portions thereof, designated for redemption.

The Flitkote Company
By: BANKERS TRUST COMPANY,
Trustee

Dated: August 28, 1971.

Debentures Forfeited Drawn

The following coupon Debentures of £1,000, denomination, which were drawn for redemption on October 1, 1960 and October 1, 1970, have not yet been presented for payment.

October 1, 1960	M 1046
October 1, 1970	M 41 427 519 558 656 1252 1848

ZAMBIAN ANGLO AMERICAN LIMITED (Incorporated in Bermuda)

NOTICE IS HEREBY GIVEN that a final dividend (No. 70) of 15p p share in respect of the financial period ended 30th June, 1971, has been declared available to members registered in the books of the Company at its close of business on 15th September, 1971. This dividend, together with 1/4 interest dividend of 25p per share declared on 11th February, 1971, makes a total for the financial period 28th June, 1970, to 30th June, 1971, of 40p per share.

The Company is unable to hold in Bermuda currency cash funds arising from revenue sources and accordingly this dividend is declared in the current of the United Kingdom currency.

Holders of Shares Warrants to Share are notified that the dividend will be payable on or about 22nd October, 1971, against presentation of coupon No. 7 at the London branch office, Charter Consolidated Limited, 1071, Austin Friars, London, E.C. 2, or at Bankers Trust Company, 15, Abchurch Lane, London, E.C. 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Attention is drawn to the fact that whereas dividend warrants posted from Johannesburg have in the past been drawn in South African Rand, such warrants will until further notice be drawn in United Kingdom Currency on the Company's London Bankers. The Board of Directors has taken this decision in view of the fluctuations in exchange rates between United Kingdom and South Africa since the current dividend was declared. It is requested that holders of this dividend to authorise their banks in Bermuda or authorised depositaries in the United Kingdom to credit to blocked accounts.

In terms of current United Kingdom exchange control regulations members with restricted addresses outside the scheduled territories will receive payment in transferable sterling.

In respect of dividends payable from the United Kingdom transferable funds to or to the order of members whose registered addresses are in the United Kingdom, or other members who have mandated payment to address in the United Kingdom, the standard rate except where authority has been received from the Inspector of Foreign Dividends to pay without such deduction, in all other cases the United Kingdom income tax will be deducted.

Subsidiaries for the period 26th June, 1970, to 30th June, 1971 are given below:

INVESTMENT INCOME	£000's	£000's
Dividends from investments	979	979
Interest and sundry income	242	242
Surplus on realisation of investments	14 118	359
Less: Administration and other expenses	284	14 577
Interest paid	115	605
Profit before Taxation	14 069	14 069
Less: Provision for Foreign Taxation	134	134
NET PROFIT FOR THE PERIOD	13 935	13 935
Add: Estimated income tax	221	221
Provision against loss no longer required	121	244
	14 278	14 278

APPROPRIATIONS:
Unappropriated profit 28th June, 1970
Less: Dividend No. 68 of £1.125 paid on

NUCLEAR INDUSTRIES

This Financial Times Survey marks the 4th International Conference on the Peaceful Uses of Atomic Energy which opens in Geneva next Monday.

Admission fees to the club are high

By DAVID PISHLOCK, Science Editor

"Launching a reactor system is like joining an exclusive club; a high admission fee has to be paid initially to secure the option of future benefits and then a substantial annual subscription to cover the cost of providing the services needed to manage and maintain the facilities at a high level of efficiency." This is the view of E. S. Booth, CEBG Member of the Executive for Engineering, 1971.

Just how exclusive is the club for nuclear power? We might gauge from the fact that five nations only—the U.S., Britain, Canada, Russia and France—have launched substantial programmes based on reactor systems of their own design. And one, France, has allowed her membership to lapse for the time being by buying a U.S. design of reactor. Conceivably Canada, and even Britain too, could yet find the subscription too steep.

Nuclear electricity showing a substantial economic advantage over fossil fuel sources will arrive only with the fast reactor. Where the fast neutron reactor differs from the slow-neutron or thermal reactors of the world is in the way it allows neutrons to work very much harder. It has no moderator to slow them down, so their energy levels typically are 10 times as high. These lively neutrons are much more efficiently used, in other words the system has a good neutron economy. Moreover, excess neutrons, and any that may leak from the core are soaked up by a fertile material such as uranium-238, breeding more, and returned to the reactor as fuel. All nuclear nations are agreed on one point: the fast reactor is the "ultimate" towards which their nuclear programmes are directed. Only the time scale differs. The U.S., with \$38,000m. spent on or committed to their thermal systems, sees less urgency to introduce the fast reactor than Europe or Japan, where power costs are appreciably higher.

But the fast reactor relies heavily on the bedrock of thermal reactor experience. In the first place, no more than a tyro at turbines could hope to produce an RB-211 engine could an inexperienced reactor builder expect to make a fast reactor successfully. It is hundreds of times more highly rated than thermal power plants. In the second place, it is fuelled with plutonium, a by-product of the thermal systems, instead of enriched uranium.

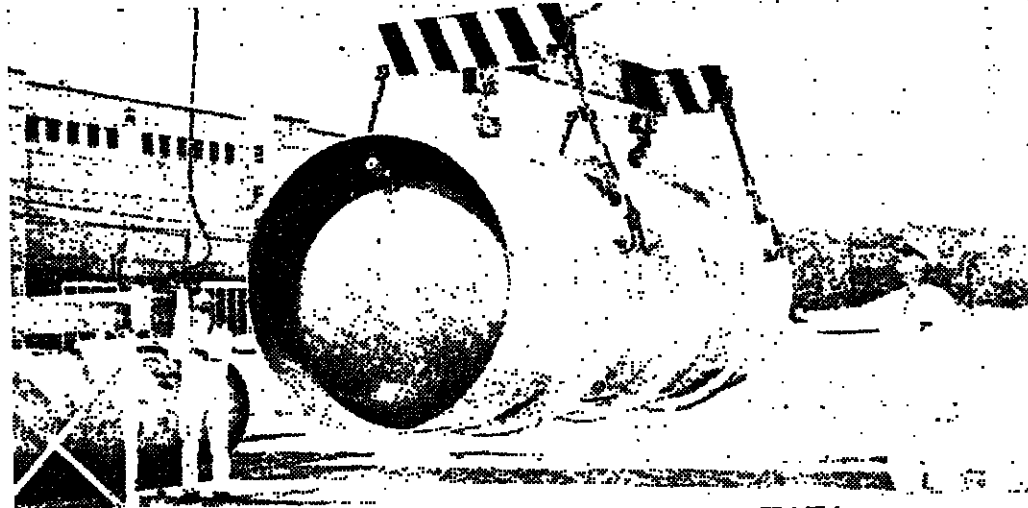
Fast reactor

Like the Phoenix of Egyptian mythology, which when consumed by fire rose again from its ashes, the fast reactor raises power from the ashes of thermal reactors. (The French, who have a prototype fast reactor under construction at Marcoule, have named their project Phoenix.)

For Britain, with the 250-MW prototype illustrated here near completion at Dounreay, and for France the economics of the fast reactor are closely allied to a first-generation nuclear power programme based on a prolific producer of plutonium. The gas-cooled natural uranium systems adopted by both countries yield plutonium more than three times as fast as the U.S. designs of water reactors.

Provided the calculations are right and these systems "breed"—make more plutonium than they consume—the fast reactor will extract far more of the energy latent in the atom: more than three-quarters compared with about

The Prototype Fast Reactor which is under construction at Dounreay in Scotland will pave the way for the large power fast reactors of the future.



Uranium ore concentrates being transported by the UKAEA.

has been invested in a nuclear fleet, and for whom the two light water reactors were originally evolved.

By comparison, Britain's investment to reach the same stage of development of the gas-cooled system, including the cost of the economic magnon stations, is estimated at \$2,000m. A similar sum has now been committed to the advanced gas-cooled reactor stations. Unfortunately, while the U.S. has established commitments to 20,000 MW of light water reactor power outside the U.S. and the Eastern bloc, no overseas orders have been placed for the

AGR, or, moreover, are thought the system chosen by the U.S. Navy, is also the most popular when, in the late 1950s, Hinton advised a gas-cooled route to about 60 per cent of the nuclear capacity ordered in the U.S.

But Britain chose gas because it offered an assurance of safety not possible from the water-cooled systems. As a result engineers were completely at home, offers some compelling advantages over the unfamiliar gas-cooled approach. An important one is a more compact reactor, a feature with an important influence on capital costs, and one in which continuing progress has been assured by the special demands of the U.S. Navy. The PWR, between the water and gas-

cooled systems under construction. But in a world in which money is dear the AGR, although cheaper to fuel, is handicapped at the outset by which, in international competition, has proved a match den increases as its competitors spread their entrance fees over burgeoning order books. Two years ago the CEBG thought the answer to a plutonium supply situation which calls for the construction of thermal reactors for at least another two decades yet lay with a still more advanced type of gas-cooled reactor, much more highly rated than the AGR.

The high-temperature reactor (HTR), cooled with helium gas, even offered the seductive prospect of reducing the cost of the conventional side of a nuclear station, by by-passing the steam-raising cycle and driving gas turbines directly.

Unfortunately, in its eagerness to promote the HTR—some say because it was anxious to establish its independence of the U.K. Atomic Energy Authority—it ignored the cost, which all past experience shows will be high, of learning to build HTR stations; while the trauma of the RB-211 engine indicates that developing a big helium turbine could easily run up a bill of \$500m.

In the article that follows, fast reactors.

Sales overseas

Or can a compromise be reached whereby Britain might take greater advantage of the subscriptions it has already paid to the nuclear club? A compromise might authorise the generating boards to continue to build AGRs, at the same time subsidising the cost of introducing the SGHWR into the British "grid" in anticipation of stimulating sales overseas.

Meanwhile it might seek ways of sharing the admission fee for the HTR with other nations, so that eventually it might succeed the AGR as a cheaper plutonium-producer for fast reactors.

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NUCLEAR INDUSTRIES II

Outlook in Britain less than bright

By JAMES TROTTER

Britain's nuclear reactor industry is in bad shape. Starved of business, the Nuclear Power Group has just laid off 20 per cent. of its headquarters staff. And British Nuclear Design and Construction, the other reactor-building consortium, does not seem to be any better off. The Government cannot find a buyer for the Industrial Reorganisation Corporation's shareholding in the company.

But the future looks even bleaker for the industry. Like the rest of the heavy electrical industry, it has been hit by the downturn in capital purchases by British electric utilities, themselves suffering sluggish demand growth. TNPG, with a design contract under its belt, thought it had the contract to build the four 660 MW Advanced Gas-Cooled Reactors for the Central Electricity Generating Board's Sizewell "B" station in the bag. But TNPG was left disappointed after the Electricity Council did its annual load forecasts and CEGB found it did not need four reactors right now. So there is no business for the industry this year.

Present signs

The outlook for next year is not bright either. Present signs are that CEGB will buy one new power station next year, which could be Sizewell "B". But short of cash itself, CEGB should buy the power station that costs the least in the short term: a low capital cost station. The North of Scotland Hydro-Electric Board could also hand out some business. It took a bid in July from TNPG (BNDC failed to respond to the Board's invitation) for a twin 660MW steam generating heavy-water reactor power station to be built at Stake Ness. But the future of Stake Ness is clouded, among other things, by the second disruption that the industry had to face in the shape of the Vinter Committee.

Peter Vinter is a Deputy Secretary in John Davies's Department of Trade and Industry, who, with two fellow committee-men, CEGB chairman Sir Stanley Brown and U.K. Atomic Energy Authority chairman Sir John Hill, is supposed to decide on a British nuclear reactor policy.

There already was a Reactor Policy Committee in being when Mr. Vinter came along. So one thing that the new committee means for sure is that

someone was none too happy with the old body. The secretive committee, chaired by Sir John Hill, became in the view of its critics a rubber stamping machine for badly-thought-out CEGB decisions.

It is denied, but the new committee could also have been designed to help the consortia. With active Government assistance, TNPG was leading America's Westinghouse, West Germany's Kraftwerk Union and Canadian General Electric in the competition to build Australia's first nuclear power station at Jervis Bay. TNPG's bid was based on the only British reactor system that remotely interests foreign utilities, the steam generating heavy water reactor. But meanwhile, back at home CEGB publicly proclaimed its preference for the High Temperature Gas-Cooled Reactor over SGHWR, inferring little British domestic faith in the system that badly upset TNPG's supporters in Government, so maybe Mr. Vinter, whose committee meant that CEGB had to go away and think again, was induced to shut CEGB up while TNPG went about its business in Australia. (In the end, Australia deferred construction of Jervis Bay.)

But while the new committee was perhaps designed to help the consortia, the effect was largely the reverse. By throwing reactor policy wide open while it sits, the committee has compounded the uncertainties facing the industry. Also, the composition of the committee, which includes no direct consortia representation, once again confirmed the traditional British Government/CEGB/UKAEA attitude that it's the consortia that matter the least. This caused raised eyebrows even at CEGB, often regarded as the number one consortium basher. (It is no coincidence, the argument goes, that the countries with monopolistic State utilities, Britain, France and Italy, are the countries with weak nuclear industries.)

Whatever the reason for its existence though, the Vinter Committee is now at work. Aided by a rash of working parties, it is examining just about every thermal reactor system in sight: the present system in commercial use in Britain, the AGR; CEGB's favourite reactor of the future last year, the HTGR; the overseas

favourite, SGHWR; and, by cut terms of reference. It seems to be, as they say, examining the implications of alternative decisions. Which may be a good thing.

Best prediction

Right now, CEGB seems to have abandoned the HTGR because of its high development costs and the best prediction half way through Mr. Vinter's exercise on what it will actually do at the end of the day is to keep on doing what it was doing before—building AGR's.

The AGR has obvious attractions for CEGB. For one thing, though it is undoubtedly an expensive reactor system, the act

of changing systems is expensive for CEGB too. And under the present Government, it might be doubly expensive for CEGB because the Government is asking the Board to pick up more of the tab for Britain's nuclear R and D programme. Another reason for not changing systems is that none of the CEGB's AGR's is working yet and there is a good case for overcoming the problems of the AGR before taking on a new system and with it, almost certainly, a new set of problems.

For the component suppliers to the nuclear industry too, a decision to stick with the AGR has its attractions. They could keep on producing the same old components.

But the most urgent problem is neither to keep CEGB nor the component suppliers happy. It is to strengthen the ailing consortia. This could be done by the simple expedient of handing them some business. But on present forecasts, this could only be a short-term solution and the same old problem would come back again sooner or later. The real problem is that the best guess is that CEGB's long-term purchases of new generating plant will only be about 4,000MW a year. This, arguably, is not enough to keep two turbo-generator manufactur-

Major investment in enrichment plants

By Dr. H. E. SCHIMMELBUSCH and P. JELINEK-FINK

Uranium enrichment is—at 30-35 per cent. of the total cost—the most expensive step of the nuclear fuel cycle. For several reasons, it occupies an exceptional position in the nuclear industry.

All feasible enrichment technologies with the exception of the nozzle process are subject to strict classification. At the same time, the civilian requirements of the western world outside the U.K. and France are practically solely supplied by the U.S. Atomic Energy Commission (USAEC), which means that the AEC has the position of a monopoly supplier. It must also be remembered that the build-up of enrichment capacities needs extremely high investment costs and that all existing enrichment plants were originally constructed for military programmes. Therefore, economic criteria were not the only factors applied.

During recent years it has become apparent that the existing U.S. enrichment capacities will be able to cover the requirements of the western world up to about 1980 only if they are enlarged by improvement and up-rating programmes and a considerable amount of preproduction during the next several years is carried out. The annual needs of the western world and of Western Europe in the period 1970-85 show that the European demand is about 10,000 te SW (metric tons of separative work) in 1980 and about 18,000 te in 1985. On the basis of the current price level of \$/kg 32 SW these figures correspond to annual turnover of \$320m. in 1980 and \$576m. in 1985. Even assuming that the separative work needs for all reactors becoming operational before 1974 or 1975 will be committed on a long-term basis to existing enrichment suppliers—mainly, of course, to USAEC—these figures will be reduced by just less than 10 per cent.

It has been indicated that new enrichment capacity will be necessary by about 1980. Since nuclear energy will play an increasing role in meeting Western Europe's electrical energy requirements, it is—

for economic and political reasons—hardly tolerable to depend on one single supplier abroad. Some of the European countries, especially the U.K. and Germany, have a commercially competitive reactor and nuclear fuels industry. The experience of recent years has shown that it is advantageous for this industry to be supported by a domestic source for uranium enrichment. These reasons and, of course, the aim to establish a new profitable industry able to gain a share of this very big market, have made uranium enrichment operations a matter of increasing interest in Europe during the last few years.

The investment necessary for a major enrichment plant is of the order of \$500m. to \$1,000m. The large investment and the difficulty of the technology, leading to additional research and development costs of several hundreds of millions of dollars, made it clear that multinational co-operation is necessary in this field.

Two initiatives have been taken in Europe in order to come to a multinational enrichment plant. The first is the trilateral agreement between the United Kingdom, Germany and the Netherlands on collaboration in the development and exploitation of the gas centrifuge process for producing enriched uranium. Under this contract two industrial organisations have been set up: CENTEC GmbH, Bensberg (Germany) which will develop and manufacture centrifuges and other components and will design and construct enrichment plants; and URENCO, Marlow (U.K.) which will own and operate the enrichment plants and sell enrichment services. The shares of both companies are held by industrial groups from the three countries.

First phase

Meantime, at the invitation of the French Commissariat à l'Energie Atomique (CEA), companies in other European countries are at present considering whether to participate in a feasibility study under contract with CEA by engineering companies. The study is on the basis of the French gaseous diffusion technology developed by CEA.

The tripartite centrifuge organisations are entering the first phase of a centrifuge plant construction programme which envisages an enrichment capacity of 350 te SW/a; part of this will be constructed in the U.K., another section in the Netherlands. The first tranche of this capacity, about 90 teSW/a, will consist of demonstration plants currently under construction at the two sites in the U.K. and in the Netherlands. The tripartite companies have not yet finalised their plans for a large-scale expansion of centrifuge plant capacity. The companies can be expected to have substantial plants in operation by 1977 at the latest and to aim thereafter at providing the majority of the subsequent increase in European demand.

While the centrifuge process allows the extension of capacity in fairly small units, gaseous diffusion plants can economically be built only with capacities of 5,000 te SW/a at least. This means that an investment decision for a gaseous diffusion plant involving about \$1,000m. has to be taken not later than 1973/74 if additional capacity should be available by 1979/80. The French claim that their technology, based on the experience with the gaseous diffusion plant at Pierrelatte, is more proven than the centrifuge method. The promoters of the centrifuge on the other hand argue that under European conditions, where power costs are considerably higher than in the U.S., the power-intensive diffu-

Power Reactors in Member States in operation and under construction

End of April 1971

Reactor Type	In Operation		In Construction	
	No. of Reactors	No. of Countries	No. of Reactors	No. of Countries
PWR	19	9	60	9
BWR	24	10	29	6
GCR	34	4	3	2
AGR	1	1	10	1
HTR	2	2	3	2
LWGR	10	2	8	1
HWR	8	5	13	8
Other Types	4	3	5	5
Total	102		131	

isn't really enough to keep two nuclear consortia going, because only a proportion of the 4,000MW will be nuclear.

So the two consortia should ideally be merged. This presents enormous problems. The House of Commons Select Committee of Science and Technology recommended a single nuclear contracting organisation to Mr. Anthony Wedgwood Benn but he could not work out a way of doing it. The consortia objected in the strongest

possible terms and so, too, did CEGB. But the consortia now aren't in such good shape to object, and even at CEGB there are signs that it is beginning to accept that maybe it will have to face up to monopoly domestic suppliers sooner or later. Right now, it faces unhealthy suppliers right across its purchasing spectrum: not just in nuclear reactors but also in turbine generators, transformers, switchgear and boilers. Also it faces criticisms from overseas for protecting this unhealthy industrial edifice with a sophisticated armoury of non-tariff barriers to trade. And away with their domestic suppliers so overwhelmingly essential and then, when they're on the foreign suppliers.

As far as the choice of reactor is concerned, what the industry obviously needs to make it healthy is a reactor decision, that will sell overseas. This wants to play safe, should rules out the AGR because it is too expensive for anyone but other than Britain's State monopolies. Foreign utilities are not

remotely interested in the system. The high temperature cooled reactor is a long prospect. But that is not in the bank—in fact it is a money out of the bank reports of its development are correct—and money bank is what industry needs. So there are only really systems to choose from: light water reactors, SGHWR.

Water reactors

U.S. light water reactors have the colossal advantage that are what sells just about everywhere in the world. Britain and Canada. An advantage is that if Britain wouldn't ever again find technological isolation as it done over the corrosion problem that hit the first generation magnox reactors. A disadvantage with light water reactors, there are safety worries about them. Whether these are justified is debatable but it is upshot in Britain is that safety authorities might make them too expensive. A bigger disadvantage is that they are not British. After spending hundreds of millions of pounds on trying to develop a domestic nuclear technology it is a tough thing to do to a sophisticated industrial edifice with it all.

In the end, the French did the sensible way out of the thermal reactor technology: a problem would be to permit for the British to do so is monopoly domestic suppliers so overwhelmingly essential and then, when they're on the foreign suppliers. Whereas the French had, make them compete with systems that might sell in foreign markets, the British do in SGHWR. It is not certain it will sell but it could. So, when it makes the industry healthy is a reactor decision, that will sell overseas. This wants to play safe, should rules out the AGR because it is too expensive for anyone but other than Britain's State monopolies. Foreign utilities are not

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SIMON RIPPON, Editor, Nuclear Engineering International

Company or group of companies	Licence arrangements	Types of reactor offered	Orders completed Orders in hand			
			No.	Capacity MW (e)	No.	Capacity MW (e)
GERMANY						
AEG	GE (West.)	BWR	4	529	919	13 10,535
Siemens		PWR	2	390		
Krupp	BEC Mannheim GHH-MAN	HTR	1	13	1	300
BEC Mannheim		HTR				
GHH-MAN						
Siemens	Interatom	Na cooled	1	18		
Deutsche E. & W.						
BEC Mannheim						
Deutsche E. & W.	BNDG B & W	AGR				
U.S. E. & W.		PWR				
FRANCE						
Various consortia of French companies		gas-cooled	7	1,312	3	1,560
Jemmont Schneider	West	PWR			1	870
Creusot Loire						
CGE, Alghem: SOGERCA	GE	BWR				
BELGIUM						
Belgoyndéaire	Various	Various	1	11		
ACEC (Westinghouse)	West	PWR			2	800
Cockrill-Ougrée						
ITALY						
Ansaldo	GE	BWR			1	840
Agip Nucleare	TNPG KWU	AGR LWR				
Fiat, Montecatini Edison, Breda	West	PWR				
SWEDEN						
ASEA	ASEA-Atom	BWR	2	450	3	1,922
AE Atomenergi						
Monitor Group	West	PWR			1	809
HOLLAND						
Rhine-Schelde Group	GE	BWR				
VME-Stork		PWR				
SWITZERLAND						
BEC Baden-Westinghouse	West	PWR	1	350	1	350
BEC Baden-GE	GE	BWR	1	306		
INTERNATIONAL						
ACECO, Framatome	West	PWR	1	260	1	870
SOGERCO, BEC, GE	GE	BWR			1	830
WENESE	West	PWR				
TNPG, KWU		all types				

No less important is the fact that the KWU-TNPG initiative brought together eight other European industrial and research organisations to sign a number of associated agree-

Considerations such as these led to the rather unwieldy solidification of industrial consortia for certain's large first generation programme of nuclear power stations and a similar approach, even more unwieldy — was followed in France. The German nuclear market has, on the other hand, been dominated by the two huge electrical engineering companies, AEG and Siemens, who enjoy a position in Germany which is comparable to the American giants, General Electric (GE) and Westinghouse, with whom, respectively, they took out licences for boiling water reactors (BWR) and pressurised water reactors (PWR). When, two years ago, AEG and Siemens got together to form Kraftwerk Union (KWU) it emphasised in its main task the need for a firm base in the supply of modern power plant. Now KWU has the largest order book for nuclear power plant outside the U.S. with a virtual monopoly in the German market and three important export orders in Argentina, the Netherlands and Austria. (Siemens now operates independently of the Westinghouse PWR licence).

In July of this year there was a further coming together of nuclear leaders: The Nuclear Energy Group (TNEG), who can claim a claim for the largest share of enriched nuclear power plant construction ever in the German market, is now represented, alongside the framework contract with KWU under which the two groups will work together in bidding for jobs in other countries. They also agreed to collaborate on the extensive business of developing and exploiting commercially the more advanced reactor types such as the fast breeder reactor.

Meanwhile, too, Siemens have a party, in which the French, the West German stake and Deutsche B. & W. a 20 per cent. stake, involved with Benelux partners in FBR development; Belgondisclair (set up by Belgium industry to undertake nuclear reactor and fuel cycle development); Neratom (a similar Dutch group originally set up to handle all commercial nuclear work of the member companies but now reorganised to handle only research and development projects); Agip Nuclear (part of Italy's nationalised ENI chemical and mining group); BNFL (the new British nuclear fuels corporation); the Reactor Group of the U.K.AEA; and the Karlsruhe Research Centre.

Notable by their absence at the gathering associated with the KWU-TNEG agreements were the French Atomic Energy Commission, for the reason given that it was not possible to find a French nuclear group which was not already linked through licensing agreements to a U.S. reactor manufacturer. The French last year abandoned their nationalistic fervour for an independent developed natural uranium gas-cooled reactor fuel and turned instead to the American light-water reactors using enriched uranium. As a result, the French companies have rapidly reactivated licensing agreements with American nuclear companies. The Transnucleo group, in which Jeanette Schneider have a 50 per cent. stake, has already been successful in obtaining the order for Fessenheim I with a Westinghouse PWR licence, and CIE Generale d'Electricite (GCE) is bidding strongly for the second unit through a group called SOGERCA, which has a GE BWR licence. In addition, Babcock Atlantique, who re-

- (Cont'd.)

continued from previous page

The recognition that new enrichment plants will be necessary by 1980 and the wish by the Europeans to become more dependent has, as has been noted, led to several projects inside the U.S. Two (or three South Africa is included) technologies are competing in different countries are promoting these technologies. Due to the very large investment costs necessary for the build-up of enrichment plants and the high research and development effort involved, but especially because enrichment has an important economic and political role to play, it must be expected that the final decision will be influenced by factors other than pure economics. From an industrial standpoint it seems, therefore, necessary to evaluate thoroughly the technical and economic parameters of the different proposals as a function of the different sites before the decisions for major investments are made. On the other hand a timely and co-ordinated decision in Europe is absolutely necessary.

cently merged with Five-Lille, have strengthened their family ties with the U.S. B and W with a view to exploiting the American company's PWR design in France.

This turn of events in France is all the more ironical since the French Government had earlier blocked a bold initiative on the part of Westinghouse to form the sort of multi-national company that many "Europeans" keep on advocating. Westinghouse tried to gain control of both Jeumont Schneider and the leading Belgian electrical engineering company, ACEC, by buying out Baron Empain's majority holdings in the two companies. These two were to be linked with Westinghouse associates and licensees throughout Europe to form the basis of a strong international company specially suited to undertaking large nuclear projects.

Even though Westinghouse were not allowed to take over control of Jeumont Schneider, they have since pressed ahead with their take over of ACEC and are co-ordinating their European operations through a new organisation in Brussels known as WENESE (Westinghouse Electric Nuclear Energy Systems, Europe). By making the maximum use of local manufacturing capacity and manpower, WENESE hope to make themselves more acceptable to those who fear U.S. domination in Europe.

A new industrial grouping, which may have wider international significance, has recently emerged in Germany. Brown, Boveri & Cie (BBC Mannheim), who used to claim a sizeable chunk of the German market for electricity generating plant, have failed to break the KWU monopoly of the nuclear power plant market with the licence they hold for the British advanced gas-cooled reactor (AGR), and the private electricity utilities have also expressed concern about the lack of effective competition in the nuclear field.

The new group has been formed by BBC Mannheim, Deutsche B&W and the U.S. B&W and will be able to offer the high efficiency PWR design of the American company. The wider implication of this grouping is, however, the bringing together of the huge B&W international family of boilermaking companies - and the Brown Boveri Company (BBC Baden) who, from their base in Switzerland, enjoy a pre-eminent position in the world heavy electrical engineering markets through a wide network of associates and licensees. The U.S. B&W has certainly been active during

the past year, strengthening its involvement in the British and French companies but to date the Swiss company has been a little bit cool about getting too

lightly involved in international nuclear groupings. They have instead declared the policy of working with any competent reactor manufacturer on a project-by-project basis.

National basis

There are still a large number of prominent European engineering companies which do not fall conveniently into any of the tenuous international industrial groupings. Many of these are set up to operate on a national basis with the help of a U.S. licensing arrangement included in this category are: Ansaldo Meccanico Nucleare (part of Italy's nationalised IRI group) who with a G.R.BWR licence are

There are still a large number of prominent European engineering companies which do not fall conveniently into any of the tenuous international industrial groupings. Many of these are set up to operate on a national basis with the help of a U.S. licensing arrangement included in this category are: Ansaldo Meccanica Nucleare (part of Italy's nationalised IRI group) who with a GE BWR licence are building Italy's latest nuclear power station; the Fiat-Montecatini Edison-Breda group competing with a Westinghouse PWR licence; the Rhine Scheide group in the Netherlands now offering BWRs under a GE licence; the V&M-Stork group intending to compete in the Netherlands with a PWR licence of U.S. or German origin; the Monitor group in Sweden now building a PWR with a Westinghouse licence; and a number of companies already mentioned in France.

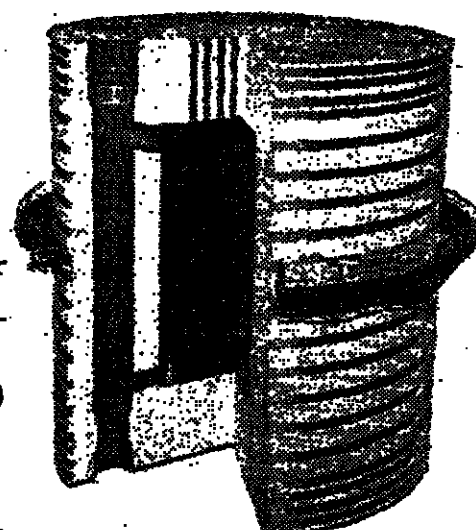
A notable exception is the ASEA-Atom group in Sweden which, quite independently of the U.S., has developed the capability to build commercial BWRs. With the lion's share of a large domestic market for nuclear power plant and with the formidable reputation of ASEA for high quality electrical engineering, this group must be considered a serious competitor in international markets and a desirable partner for possible future alignments.

There are also some large engineering companies in Europe which have concentrated, somewhat wisely, on the supply of components for all types of reactor no matter who is the prime contractor in the power station project. Notable success has been achieved in international markets by companies such as Rotterdam Dockyard in the Netherlands, Sulzer in Switzerland and Wagner Birp in Austria—all from small countries where there is no large national programme of nuclear power station building on which to gain experience. In Germany, Fried Krupp and the GHE-MAN group have been involved with BEC in an important programme of HTR development culminating in a large prototype on which construction work is just about to start.

However, with the commercial exploitation of the HTR still apparently some way off, Krupp is opting out of this project and would appear to be concentrating its efforts on component work.

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Model of the pressure vessel at Hartlepool Nuclear Power Station, which is to be circumferentially pre-stressed. Cut-away shows position of "pod" boiler (left), one of the features of the simplified construction, available by employment of the wire-winding system.

96 ft. diameter with walls 11 ft. minimum thickness, and a design pressure of 422 pounds per square inch.

Our research programme on pre-stressed concrete pressure vessels started in 1960 and is a continuing process in the development of more advanced reactors. Wylfa's engineering achievement has been followed by one equally impressive in the same field — the design of the cylindrical vessels for

The wire-winding system designed and developed by Taylor Woodrow to apply circumferential pre-stress to nuclear and other large concrete pressure vessels, operating on a test rig at Southall.

stations in which, for the first time, circumferential stressing of a large cylindrical vessel is accomplished by winding high densities of tensioned pre-stressing steel accurately around the outer periphery.

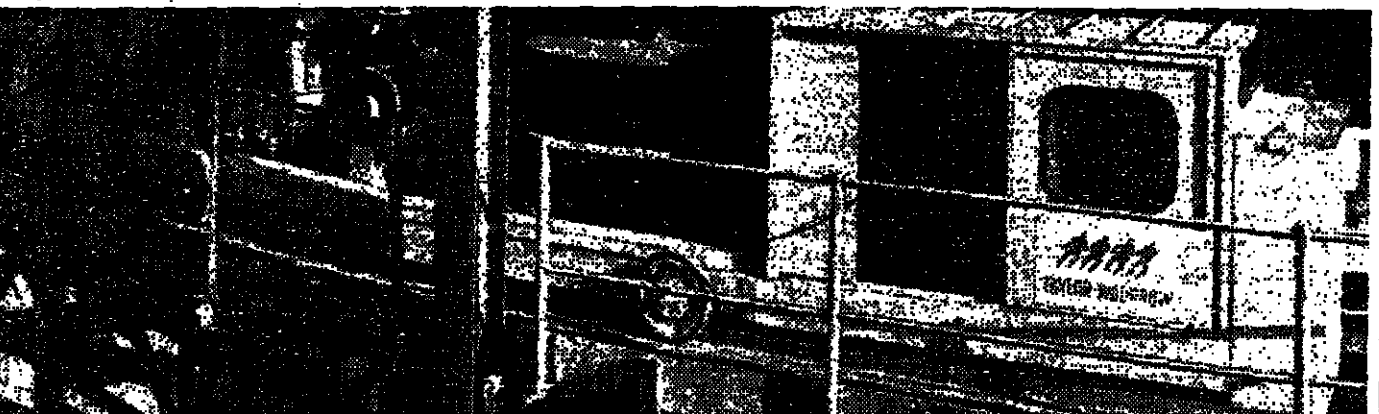
This wire-winding system marks a major advance in pre-stressing techniques. Some 8,500 miles of 0.2 inch diameter will be wound in all, in pre-formed channels in the outer surface of the vessels.

Other aspects of Taylor Woodrow's expertise in up-to-date or rapidly developing techniques have been successfully applied to nuclear power station construction.

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WALL STREET—OVERSEAS MARKETS

Mild rally in cautious trading

BY OUR WALL STREET CORRESPONDENT

A MILD RALLY developed on Wall Street today, but the market was struggling to hold gains after a number of uninspiring news developments late in the session put some pressure on the list.

The Dow Jones Industrial Average finished 0.85 up at 899.02, after rising 5.25 to 903.40, while the NYSE All Common Index advanced 2 cents to 54.78. Volume expanded 340,000 shares to 10.77m, while gains led losses by 700-600.

Near the close, the Commerce Department reported a drop in July construction spending, the first in a year.

In other developments, President Nixon asked for a delay in Federal pay increases and an influential economist called for a formal declaration of the dollar.

While analysts noted that none of these developments was especially important, their net effect was to cause concern in an already hesitant stock market.

"Glamours" and Computers were mixed. Bausch and Lomb dropped \$1.00 to \$141.00, but Xerox rose 1.00 to \$171.00. IBM lost \$2.00 to \$301.00, but Honeywell Control Data rose \$1.00 to \$59.00. Avco Products declined \$1.00 to \$21.00.

Two Oil issues led the active list. Amerasia rose \$1.00 to \$55.00—it is defending itself against an Interior Department plan to cancel its import quota from the Virgin Islands. Occidental Petroleum added \$1.00 to \$161.00.

Airlines, especially those operating transatlantic routes, gained following the announcement of a conference next week in Geneva of heads of member Airlines of the International Air Transport Association (IATA) to seek approval of a new, low-fare package, and thus avoid a price war. IATA also extended its deadline for acceptance of the package by Lufthansa, German airline, until September 15. Lufthansa has vetoed the package at a Montreal conference.

TWA featured with a rise of \$1.00 to \$22.00, after a U.S. Appeals Court ordered payment of \$145.4m by Hughes Aircraft.

Western Union moved up \$1.00 to \$43.00 on the settlement of a strike. Motors were mixed. General Motors gained \$1.00 to \$33.00, it reported a sharp rise in its output in August, compared with a year ago. Chrysler, which also reported an output rise for August, shed \$1.00 to \$69.00.

Home Builders, both Mobile and Conventional, were also prominent. Refrain Industries gained \$1.00 to \$23.00 and Fleetwood Enterprises, which announced a stock split and plans for a mobile home park, jumped \$2.00 to \$57.00.

Other housing issues included: Boise Cascade, up \$1.00 to \$25.00, and Weyerhaeuser, up \$1.00 to \$54.00.

The American SE Index put on 5 cents to 525.25.

Dividends closed \$1 up at \$7.87, after reporting sharply higher earnings.

OTHER MARKETS

Canada firmer

Canadian Stock Markets were moderately higher at mid-day, overcoming an early small decline. The Industrial Index was up 0.45, Western Oils rose 1.01 and Golds gained 1.16, but Base Metals shed 0.31. Utilities were mixed.

Falconbridge Nickel improved \$1.00 to \$307.00.

PARIS—Generally firmer in hesitant trading. Gains in Banks and Financials included Indesec, Cie Bancaire and Lorraine.

Storages, reduced advanced Frs.10.5 after higher sales forecasts.

Oils were hesitant, with Antares advancing but Lill Bonnières further declining. Roussel Uclaf rose in Chemicals. Metallurgies were mixed, especially Chiers and Denain.

Germans weakened slightly. Belgians were mixed, Dutch issues little changed. Transatlantic and Mining stocks resistant.

STOCK AND BOND YIELDS

Industrial div. yield 5.25% (2.91% 1970)

Price-earnings ratio 18.72 (18.34 1970)

Long-term Gov. bonds 6.00% (5.01 1970)

Most Active Stocks

Amerasia rose 1.00 to 55.00

Occidental Petroleum added 1.00 to 161.00

General Motors gained 1.00 to 33.00

Chrysler lost 1.00 to 69.00

Boise Cascade up 1.00 to 25.00

Weyerhaeuser up 1.00 to 54.00

Ind. Dividend Yield p.c.

Aug. 27 5.31 5.25 4.22

N.Y. SE ALL COMMON INDEX

1971 Wed. 525.25 525.25 525.25

1970 Wed. 525.25 525.25 525.25

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GERMANY—Markets were easier in dull conditions, while awaiting fiscal stimuli.

Chemicals and Electricals were slightly off. Volkswagen, down DM2.5, and BMW, off DM1.5 led losses, among others. Rheinisch Stahl DM1.4 in Steels, and Hamborner also turned lower.

Bonds were mixed, with Public issues lower on balance but Corporate and Foreign Mark issues were mostly well maintained.

BRUSSELS—Generally hesitant. Metallurgies were weak, with Hoboken down Frs.250 following its lower profit forecast. Sofina lost Frs.120 but Petrol refined Frs.15. Coal issues firm.

Among Foreign stocks, French issues tended slightly firmer, but German and Golds were weak. Dutch shares were little changed.

AMSTERDAM—International stocks were mostly mixed. Most Plantations were up, while Shippings were mixed. Heineken, down Fls.9, featured otherwise. Quietly mixed local Industrials. Naarden-Chemie lost another

Fls.1.5, but Gist-Brocades rose Fls.1.5.

Banks eased, most investment funds edged lower, insurances were firmer.

State Loans were quietly mixed. SWITZERLAND—Markets continued slightly irregularly. Swiss further declined Frs.10. Major Banks were generally well maintained but Financials and Insurances were narrowly mixed.

Plumage issues were also narrow in Chemicals and Foods. Stores were well maintained. Metals and Engineering showed only small price changes on the day.

State Bonds were very steady. In the Foreign sector, Dollar stocks were slightly mixed in fairly active trading, German and Dutch shares were very steady in rather quiet dealings.

STOCKHOLM—Sagging tendency. MILAN—Mainly lower, although some listed small gains were seen. Industrials were again easier, with Fiat down Lire 23 to 2,178, Montedison off Lire 4 at 662 and Snia Viscosa off Lire 35 at 1,570.

OSLO—Industrials and Shippings were easier, while Banks were quiet.

VIENNA—Slightly firmer. Banks were steady.

COPENHAGEN—The market opened with a majority of small gains, although most leading issues were slightly easier.

JOHANNESBURG—Golds were slightly mixed after an easier start. Mining Financials were easier. Small losses were seen in Platinums, attributed to a drop in the free market price of the metal.

Industrials were generally easier.

TOKYO—Generally firm, following reports that the Finance Ministry was considering a large increase in the size of the National Budget for the 1972 financial year. Volume 230m. (150m) shares.

Debt issues, including the 3-month and 6-month bonds, were unchanged on balance at 95 points premium, while the 12-month hardened slightly, to 120 to 130 discount. The dollar made modest gains against a number of leading currencies, including the guilder, Belgian franc, Japanese yen (which ended around 337 to the dollar), Swiss franc and Canadian dollar.

Construction advanced Yen 17 to 273, while Osumagumi and Kamegumori rose Yen 40 to 84.00. Penta Ocean Construction gained Yen 13 to 308. Kunitomo rose Yen 6 to 113 and Daiichi Cement rose Yen 4 to 20.00. Daifuku Machinery was Yen 50 higher at 857 and Tachikawa Machinery improved Yen 30 to 450.

Waikawa House, however, continued to decline on the day, as the Construction Ministry had directed Daiwa to suspend business in the Tokyo Metropolitan Area and Kanagawa Prefecture for a period of one month because of alleged questionable advertisements.

AUSTRALIA—All sectors retreated in dull trading.

Mining "heavyweights" to move lower included Utah, off 17 cents at \$3.08, MIN, off 5 cents to \$3.13 and Anglo, off 10 cents to \$2.21.

Among the few notable gains, Audemore picked up 10 cents at \$1.80 and Whim Creek also added 10 cents to \$4.40. Queensland Mines came back 20 cents to \$5.80.

Great Boulder shed 3 cents at \$1.65, Spargo fell 5 cents at 95 cents.

Oil, Woodside was 9 cents lower at \$1.23, after \$1.19. Mid East dipped 4 cents at 90 cents and Magellan fell 15 cents to \$1.82.

Among Industrials, BHP were off 15 cents at \$1.95, after \$2.10. W. S. Steel fell 10 cents to \$5.50 and BHP shed 5 cents at \$1.72.

APM shed 5 cents at \$1.72.

Investment 2 1/2% Premium 22 1/2% (24%)

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Equities develop a firmer tone as light selling dries up

Index recovers 1.4 to 413.0—Golds and Gilts steadier

Inter-bank market rates were steady at 10 per cent, but fell to 9 per cent on the London market. The 10 per cent rate was placed on a temporary basis.

Equities developed a firmer tone as light selling dried up. The index recovered 1.4 to 413.0. Golds and Gilts were steadier.

The 10 per cent rate was placed on a temporary basis.

COUNTY TRADING DATA

County Trading Data for the week ending September 1, 1971.

County Trading Data for the week ending September 1, 1971.

Sun Alliance up

Sun Alliance up on the day of the week ending September 1, 1971.

Sun Alliance up on the day of the week ending September 1, 1971.

BSR rally

BSR rally on the day of the week ending September 1, 1971.

BSR rally on the day of the week ending September 1, 1971.

Revived BP rumours

Revived BP rumours on the day of the week ending September 1, 1971.

Revived BP rumours on the day of the week ending September 1, 1971.

Court Line recover

Court Line recover on the day of the week ending September 1, 1971.

Court Line recover on the day of the week ending September 1, 1971.

Golds level out

Golds level out on the day of the week ending September 1, 1971.

Golds level out on the day of the week ending September 1, 1971.

Gilts steadier

Gilts steadier on the day of the week ending September 1, 1971.

Gilts steadier on the day of the week ending September 1, 1971.

Ward rates

Ward rates on the day of the week ending September 1, 1971.

Ward rates on the day of the week ending September 1, 1971.

Ward rates

Ward rates on the day of the week ending September 1, 1971.

Ward rates on the day of the week ending September 1, 1971.

	Sept 1	August 31	August 29	August 28	August 25	August 24	Avg
Government Bond	75.67	75.53	75.98	77.17	76.83	75.74	77.03
Fixed Interest	75.67	75.53	75.98	77.17	76.83	75.74	77.03
Industrial Ordinary	413.05	411.8	416.8	416.9	412.9	417.6	395.9
Gold All	48.0	47.9	48.7	51.0	52.0	55.0	49.7
U.S. Dir. Yield per 100	5.71	5.78	5.88	5.68	5.67	5.68	5.84
Earnings Yield per 100	5.79	5.81	5.74	5.74	5.72	5.74	5.84
Deadweight	10.108	10.169	10.676 [*]	11.738	11.628 [*]	11.231 [*]	8.116

^{*}10.14 410.6 11.44 408.5 10.64 410.9 11.11 412.5 8.94 411.6

HIGHS AND LOWS

	High	Low	Open	Close	Settle
1000	410.0	411.0	412.0	413.0	414.0

INTRA-DAY ACTIVITY

	High	Low	Open	Close	Settle
1000	410.0	411.0	412.0	413.0	414.0

OFFSHORE AND OVERSEAS FUNDS (p***)

	Yield %	Assets	Liabilities	Net Assets
1000	4.5	100.0	10.0	90.0

INSURANCE, PROPERTY, BONDS

	Yield %	Assets	Liabilities	Net Assets
1000	4.5	100.0	10.0	90.0

INSURANCE, PROPERTY, BONDS

	Yield %	Assets	Liabilities	Net Assets
1000	4.5	100.0	10.0	90.0

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	Yield %	Assets	Liabilities	Net Assets
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INSURANCE, PROPERTY, BONDS

	Yield %	Assets	Liabilities	Net Assets
1000	4.5	100.0	10.0	90.0


INSURANCE, PROPERTY, BONDS

	Yield %	Assets	Liabilities	Net Assets
1000	4.5	100.0	10.0	90.0

July car production rises by 6% on 1970

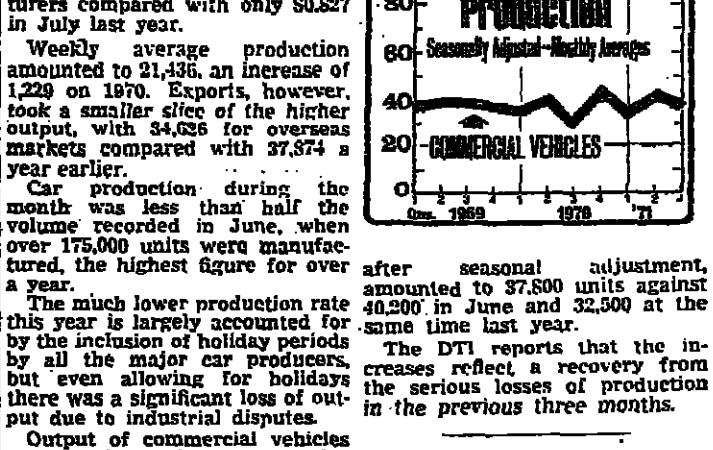
BY MICHAEL CASSELL

CAR PRODUCTION in July was 6 per cent. higher than in the same month last year while output of commercial vehicles was



Month	Production Level
Jan	155
Feb	145
Mar	150
Apr	155
May	160
Jun	165
Jul	140
Aug	150
Sep	155
Oct	150
Nov	155
Dec	150

The Department of Trade and Industry announced yesterday that in the four weeks to July 31, a total of 85,743 private vehicles was produced by U.K. manufac-

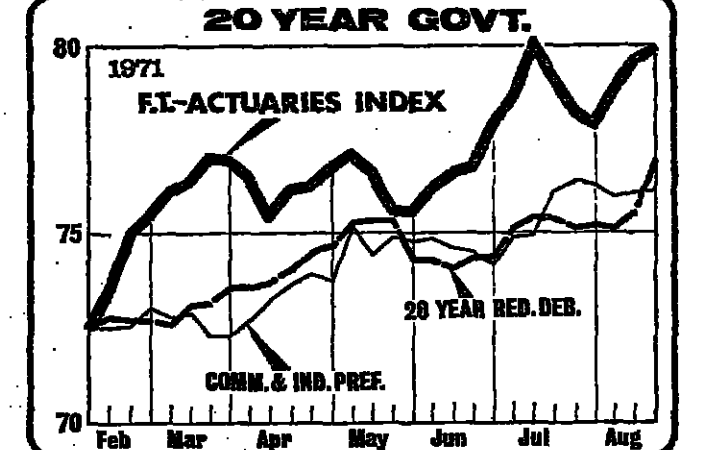


PRINTERS TRADE UNDER NEW NAME

PRINTERS TRADE UNDER NEW NAME

Hindson Reid Jordison yesterday began trading under the new title of Hindson Print Group. The decision to "streamline" the name has been taken by Mr. Henry Davis, managing director, "because in recent years we have emerged from being a local company into a national company."

"The name we have been using combined three of the largest printing companies in the North-East—J. W. Hindson and Sons, Andrew Reid and Co., and Jordison and Sons, which amalgamated between 1936 and 1964."



Hopes of a reduction in Bank Rate and talk that the long "tap" stock supplies are near exhaustion have been the main reasons behind the latest strong upward rise in long-dated Gilt-edged securities. However, the U.K.'s new restrictions on the inflow of foreign exchange has unsettled sentiment over the past couple of days. Despite this, the F.T.-Actuaries 20-Year Government Stocks index is currently standing only a little below its 1971 "high" with a rise of about 13 per cent. since the start of the year.

Prices in pence and denunciations of £2 unless otherwise stated			
BELFAST			
East Coast 1870	296		
East Coast 1871	75		
Valentine	107		
IRISH EXCHANGE			
£100 (100/8)	275.08		
Amalgamated	98		
Cement Road	63 1/2		
Goodrich	33 1/2		
Goodrich 1/2	52		
Goodrich 1/4	59		
Goodrich 1/8	59		
Goodrich 1/16	59		
Goodrich 1/32	59		
Goodrich 1/64	59		
Goodrich 1/128	59		
Goodrich 1/256	59		
Goodrich 1/512	59		
Goodrich 1/1024	59		
Goodrich 1/2048	59		
Goodrich 1/4096	59		
Goodrich 1/8192	59		
Goodrich 1/16384	59		
Goodrich 1/32768	59		
Goodrich 1/65536	59		
Goodrich 1/131072	59		
Goodrich 1/262144	59		
Goodrich 1/524288	59		
Goodrich 1/1048576	59		
Goodrich 1/2097152	59		
Goodrich 1/4194304	59		
Goodrich 1/8388608	59		
Goodrich 1/16777216	59		
Goodrich 1/33554432	59		
Goodrich 1/67108864	59		
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Goodrich 1/536870912	59		
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Goodrich 1/34359738368	59		
Goodrich 1/68719476736	59		
Goodrich 1/137438953472	59		
Goodrich 1/274877906944	59		
Goodrich 1/549755813888	59		
Goodrich 1/1099511627776	59		
Goodrich 1/2199023255552	59		
Goodrich 1/4398046511104	59		
Goodrich 1/8796093022208	59		
Goodrich 1/17592186444416	59		
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Goodrich 1/70368745777664	59		
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Goodrich 1/302231461755927808	59		
Goodrich 1/604462923511855616	59		
Goodrich 1/1208925847			

NEW "HIGHS" AND "LOWS" FOR 1971

The following securities (number in parentheses) among those quoted in London Closing Prices yesterday attained new "highs" and "lows" for 1971:—

NEW "HIGHS" (80)

BRITISH FUNDS (1)	A.A.H.	INDUSTRIALS (16)
Victory 40c 1976	Brit. Match	Quincy
COMMONWEALTH AND AFRICAN	Cawoods	Phillips Patents
LOANS (1)	Ferlieham (S.)	Press (Wm.)
Malaysia 50c 1973	Friesland Doggart	Regentian RWR
FOREIGN BONDS (1)	Harley (H.)	Relvon PWS
Ireland 7 1/2c 1981-83	Jardine Matheson	Robt. Brown
U.S. BONDS (1)	Kennedy Smale	Satt. Ind.
U.S. STOCKS (1)	MOTORS (1)	Trotter Pool
Quick (H. J.)	Quick (H. J.)	
NEWSPAPERS (2)	NEWSPAPERS (2)	
Collins (Wm.)	Collins (Wm.)	
Do. "A"	Do. "A"	
Do. "B"	Do. "B"	

Fenn-Central
Cattles Hldgs.

[illegible]

ACTIVE STOCKS

Prices in pence except where otherwise indicated.

Stock	Denomina- tion	Price on day	Change on day	high	low
Imp. Chem. Inds.	£1	15	328	—	334
Courtaulds	25p	11	131	+ 1	136
Beecham	25p	10	318	—	366
Cord Line	25p	10	144	—	109
Lloyds Bank	£1	10	506	+ 4	518
Reliance International	10p	131	+ 6	131	834
Tube Investments	£1	10	454	+ 6	487
Barclays Bank	£1	9	804	+ 8	622
Bowater	£1	9	162	—	161
Brit. Petroleum	£1	9	585	—	403
Lomb	£1	9	73	- 2	113
Northern Develop.	10p	9	222	+14	248
Shell Transport	25p	9	377	—	426
Woolworth (F. W.)	25p	9	77	+ 1	89
Turner & Newall	£1	8	145	+ 3	179

The above list of active stocks recorded yesterday in the Official Record is reproduced to-day in Stock Exchange

Whim Creek 2150 15 18 12
Woolworth (Aust.) 331
Westfield Dovecot 158
Wit Industrial (50 cents) 300

New Jersey Knit Ord. 3360 5 should
have been 2380 5 (27/8)
Clarke (T.) and Co. Ord. should have been
marked 5 1/10 (26/8). See "Quotation"

by permission of the
Council

CORAL IN

ERRATA

Chrysler U.K. 7pc Pt 574 should have been 515 (2718)

Second British Assets Tst. Ord. 2544 should have been 2454. (2718)

Mitchell: Cotts Grn. Ord. 45 4 should have been 434 (318)

Slater Walker Secs. 7pc1A. (1973) 1070 7 64 174 should have been to the 7pc1A. 64 174 carrying sub. rts. for Ord. 1181B

Minor Assets Ord. 70 should have been 69 (318)

COMPANY NOTICES

**BEARER DEPOSITORY RECEIPTS
REPRESENTING CUMULATIVE
PREFERRED STOCK SERIES K OF
INTERNATIONAL TELEPHONE &
TELEGRAPH CORP.**

A DISTRIBUTION OF \$1.00 per deposi-

CORPORATION OF ABERDEEN Bills
amounting to £500,000 were issued on
1st September, 1971, maturing on 1st
November, 1971, at a discount of five and
threequarters per cent. per annum.
This issue, together with the issue of
£2,500,000 on 1st June 1971, which

[illegible]

NOTICE IS HEREBY GIVEN that Warrants for payment of interest on 7 1/2% Debenture Stock 1988/91 will be detachable on 30th September 1971 to

The Bonds will be repaid to the holders registered on 15th September 1971.

By Order of the Board,
J. R. PEAT, Secretary.

Netherfield,
Kendal.

SOUTH AFRICAN DISTILLERIES

572 to 576 inclusive
577 to 580 inclusive
587 to 598 inclusive
599 to 600 inclusive
700 to 726 inclusive
727 to 730 inclusive
731 to 732 inclusive
733 to 1977 inclusive

Amount Called for redemption: UA 500.000.-

Bonds purchased for the redeeming fund: UA 114.000.-

Amount unapportioned: UA 386.000.-

The Trustee
KREDITBANK.
Kreditbank für Österreich, Vienna

DIVIDEND DECLARATION
PREFERENCE STOCK

NOTICE IS HEREBY GIVEN THAT at a
Board Meeting held on 27th September
31st August, 1977, a dividend of three
and three-quarters per cent
and a half per cent cumulative preference
stock for the half year ending 31st August,
1977, has been declared and payable on
her, 1977 to stockholders registered on
24th September 1977.
THE COMPANY'S PREFERENCE
STOCK TRANSFER BOOKS of the Company
will be CLOSED from 27th September to
24th October 1977, both days inclusive.

CENTRAL SOUTH AFRICAN LANDS & MINES LIMITED
Incorporated with limited liability in the Republic of South Africa

NOTICE IS HEREBY GIVEN that the ORDINARY SHARE TRANSFER BOOKS and REGISTER OF MEMBERS will be CLOSED from 16th to 22nd September, 1971, both days inclusive, for the purpose of determining those members entitled to

London Office: per: A. F. TICKNER.
 62, London EC2R 7JT.
 1st Secretary: London EC2R 7JT.
 NL-SWIFT INDUSTRIES LTD.
 London Office: per: A. F. TICKNER.
 62, London EC2R 7JT.
 1st Secretary: London EC2R 7JT.

NOTICE IS HEREBY GIVEN that the
 Annual General Meeting of the Company
 will be held in Johannesburg on 22nd September 1971.
 The Board of Directors of the Company
 has decided that the members of the
 Company entitled to attend and vote
 at the Annual General Meeting of
 the Company to be held in Johannesburg
 on 22nd September 1971, shall be the
 members of the Company who are
 entitled to attend and vote at the
 Annual General Meeting of the Company
 to be held in Johannesburg on 22nd
 September 1971, shall be the members
 of the Company who are entitled to
 attend and vote at the Annual General
 Meeting of the Company to be held in
 Johannesburg on 22nd September 1971.
 The Board of Directors of the Company
 has decided that the members of the
 Company entitled to attend and vote
 at the Annual General Meeting of the
 Company to be held in Johannesburg
 on 22nd September 1971, shall be the
 members of the Company who are
 entitled to attend and vote at the
 Annual General Meeting of the Company
 to be held in Johannesburg on 22nd
 September 1971.

NOTICE is HEREBY GIVEN that the
REGISTER of Ordinary Shareholders will

RECEIVED
Nu-Swift Secretary, Gillard, Vassell &
Transfer Office: Hope, Agar & Co.,
Epworth House,
25-35 City Road,
London, EC1Y 1AR.

	% Change		% Change		% Change		% Change
Banks	+79.16	Property	+38.70	Consumer Goods (Dur-	+19.97	Fins	+18.00
Household Goods	+53.90	Discount Houses	+35.72	able Group	+30.08	Textiles	+15.81
Mining Materials	+51.09	Electricals (excl. Elec-	+35.58	Coppers	+29.55	Packaging & Paper	+14.81
Merchant Bks., Issuing	+48.39	tronics, Radio & TV)	+35.00	Soft. Share	+28.25	Machine Tools	+13.81
Houses	+47.01	Chemicals	+34.74	Tabacco	+27.53	Entertain. & Catering	+11.51
Insurance (Composite)	+45.87	Newspapers & Publish-	+33.90	Engineering	+26.20	Teas	+7.81
Jewelry	+45.02	Motor & Distributors	+33.71	Aircraft & Component's	+25.46	Shipping	+5.61
For Purchase	+44.11	Retailing	+33.40	Electronics, Rad. & TV	+24.74	Mining Finance	-9.71
Municipal Group	+43.24	Food, Goods Group	+33.15	Rubbers	+22.84	Gold Mines (F.T.)	-10.11
Insurance (Brokers)	+41.41	Consumer Goods (Non-	+32.84	Investment Trusts	+21.35	Toys & Games	-30.21
And Manufacturing	+40.52	Durable) Group	+32.30	Office Equipment	+21.05		
Contract & Construc-	+40.54	All-Share Index		Insurance (Life)	+16.51	* Percentage changes based	
res		Industrial Group (498		Wines & Spirits		on Tuesday, August 31, 1971	
		Shares)		Oil		Indices.	

[illegible]

RISES AND FALLS YESTERDAY

[illegible]

E.T. SHARE INFORMATION SERVICE

[illegible]

F.T. SHARE INFORMATION SERVICE

BUILDING INDUSTRY—Continued

1971	Stock	High	Low	Change
1971	1140 J. H. Holdings Corp.	14 1/2	17 1/2	9.0
1971	1141 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1142 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1143 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1144 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1145 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1146 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1147 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1148 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1149 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1150 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1151 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1152 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1153 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1154 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1155 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1156 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1157 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1158 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1159 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1160 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1161 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1162 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1163 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1164 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1165 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1166 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1167 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1168 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1169 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1170 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1171 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1172 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1173 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1174 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1175 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1176 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1177 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1178 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1179 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1180 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1181 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1182 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1183 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1184 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1185 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1186 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1187 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1188 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1189 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1190 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1191 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1192 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1193 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1194 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1195 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1196 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1197 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1198 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1199 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1200 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1201 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1202 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1203 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1204 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1205 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1206 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1207 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1208 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1209 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1210 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1211 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1212 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1213 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1214 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1215 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1216 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1217 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1218 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1219 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1220 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1221 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1222 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1223 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1224 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1225 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1226 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1227 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1228 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1229 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1230 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1231 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1232 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1233 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1234 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1235 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1236 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1237 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1238 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1239 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1240 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1241 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1242 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1243 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1244 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1245 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1246 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1247 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1248 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1249 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1250 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1251 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1252 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1253 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1254 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1255 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1256 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1257 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1258 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1259 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1260 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1261 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1262 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1263 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1264 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1265 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1266 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1267 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1268 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1269 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1270 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1271 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1272 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1273 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1274 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1275 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1276 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1277 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1278 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1279 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1280 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1281 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1282 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1283 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1284 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1285 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1286 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1287 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1288 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1289 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1290 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1291 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1292 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1293 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1294 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1295 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1296 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1297 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1298 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1299 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1300 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1301 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1302 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1303 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1304 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1305 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1306 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1307 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1308 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1309 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1310 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1311 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1312 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1313 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1314 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1315 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1316 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1317 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1318 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1319 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1320 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1321 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1322 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1323 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1324 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1325 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1326 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1327 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1328 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1329 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1330 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1331 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1332 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1333 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1334 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1335 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1336 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1337 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1338 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1339 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1340 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1341 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1342 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1343 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1344 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1345 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1346 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1347 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1348 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1349 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1350 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1351 J. H. Holdings Corp.	25 1/2	17 1/2	9.0
1971	1352 J.			

[illegible]

INDIA AND PAKISTAN (cont.)	Stock	High	Low	Open	Close	Change	Volume	Bid	Ask	INDIA AND PAKISTAN (cont.)	Stock	High	Low	Open	Close	Change	Volume	Bid	Ask	INDIA AND PAKISTAN (cont.)	Stock	High	Low	Open	Close	Change	Volume	Bid	Ask
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430
431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490
491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520
521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550
551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580
581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610
611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640
641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670
671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700
701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730
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Lombard

Growth takes another knock

BY JOE ROGALY

ONE MAN'S contribution to the gross national product may be another man's problem. At any rate, the apparent reasoning behind the extraordinary powerful movement against economic growth in the United States. The main proponents were not using a phrase, of course: they would call it an ecological or environmental crusade. Never mind the words—the fact is that the new doctrine would, if applied in its extreme form, retard the expansion of the American economy.

New movement

This can be seen from two recent examples. Only yesterday our Washington correspondent reported that because of pressure from moderate devotees of the new theology, the oil pipeline of Alaska will cost more than would otherwise have been the case (because of the placatory safety and cosmetic devices that must now be built in). That is more, if the extreme environmentalists have their way there will not only be no pipeline at all, but Alaska will be kept undeveloped.

And just a couple of weeks ago, there was a surprising amount of protest against one of the domestic elements of President Nixon's new economic policy on the ground that it favoured the motor industry and would lead to the crowding of America's cities with yet more cars.

As with so many phenomena, the new movement has spread to Britain. The consequence will be that over the next few years industry will find itself subjected, on an increasing scale, to restraints on the siting of its factories, criticism of the social effects of its products, and the comprehensive regulation of the final destination of its effluents.

This development is of such importance to any economy that it affects that we really must clear our minds about it. The extremists on the pro-growth side of the argument can put their case simply thus: if the GNP is not to be enlarged, where is the money to come from to pay for the many developments that the opponents of the machine would themselves consider desirable. Like more medical care, housing, social welfare, and so on? Unmodified, this argument suggests that industry should be allowed to develop in more or less whatever manner the market dictates.

America's GNP

Yet this is surely as wrong-headed as the opposite extreme. The way out is to set on one side thoughts about the size of the GNP and to concentrate on its quality. This is, however, easier said than done. Attempts to quantify the "social cost" of such and such an economic development must inevitably be subjective.

Even so, there are ways in which new ideas can help. As reported yesterday, the aluminium can industry in the U.S. is meeting criticism of throw-away cans by paying to have them brought back; it may yet turn a profit on the deal. The output of the scrap-aluminium scheme must then be counted as an addition to America's GNP. Special anti-pollution devices on motor cars could similarly constitute additions to the national product—at least to the extent that the extra cost of having them did not diminish the sales.

Difficult

The equation that dictates that unless there are more resources there will be less to devote to new developments could be solved, at least in part, by switching the use of presently available resources from one section of the economy to another. Anybody who proclaims this must first make up his mind about what it is that we now have that we might be willing to do without. This is always a difficult choice; the usefulness of the approach is further limited by the fact that for everyone to accept those who wish to return to living in caves, there must come a point at which there is nothing further that he would want cut down.

It is therefore more practical to consider how best to spend any extra resources that might come our way. In America, the moderate environmentalists should legislate against its deleterious effects (while acknowledging that in some cases this may retard the growth rate) and (b) be certain everyone knows what the extra resources are for.

THE LEX COLUMN

Contrasts in the composites

On the face of it, Sun Alliance and General Accident were placed at opposite ends of the recovery spectrum this year. With GA far the greater potential beneficiary of an upturn in U.S. and U.K. motor underwriting. In the event a better half-year performance by SA than by GA produced a surprisingly calm reaction—SA up to 12p to 480p and GA down just 1p to 188p.

Still, in the case of GA, a £1.85m. turnaround to a £235,000 underwriting profit does mean an acceleration in the improvement after the first quarter's rate of £730,000 even if that was depressed by a £1m. deterioration in Canada. But for the present it means that we cannot look for a cut of more than £4m. or £5m. in last year's £6m. underwriting loss. It may be that with an operating ratio down to 98.15 (against 98.65) in the U.S., GA (along with the industry as a whole) is getting close to the limits of recovery over there. In the U.K., a greater improvement in the motor account could be expected in the

second half, yet the fact that GA's major rate increase came last September and that the group's U.K. expense ratio was running 4 points lower in this first half would seem to limit the scope here. The shares may be vulnerable then on prospective earnings of 10p or 11p.

By contrast a £21m. turnaround into a £21m. profit by Sun Alliance could provoke an opposite rethink about the rating here. To explain the performance is not easy, but the transfer from the marine account was apparently only a modest factor. At any rate, the upshot is that on earnings per share for the past 12 months (27p) the p/e stands at about 17, which is already usefully under the prospective average for the sector on most estimates. The U.K. fire account takes some 20 per cent. of SA's premiums and no boom was expected here against a rather favourable 1970. But it was the second half that stood to benefit from a 15 per cent. rise in industrial fire rates in January. As for the marine account—18 per cent. of premiums—the

known figures for 1969 and 1970 so far imply that the group could be drawing sizeable surpluses here over and above any contribution to current earnings. Investment income meanwhile is holding a 9 per cent. growth rate despite earlier cautions. In short, SA seems to be as fair a growth prospect as the sector.

See also Pages 17 and 18

Clarkson

Although Clarkson International was talking a few months back about an encouraging start for its cutting tools, the recent trend in the engineering industry has been sluggish enough to rule out any really exciting progress for 1970-71 as a whole. So a pre-tax gain of 8 per cent. to £870,000 at half-time is a reasonable performance in the conditions. Clarkson had the benefit of a round of price rises dating from December, and was able to build up on the export side (30 per cent. of sales in 1969-70), and a higher proportion since then) to offset a flat U.K. market.

What remains obscure is the extent to which the benefits of integrating Tap and Die have still to be seen: after getting on for three years it could be unwise to hang too many hopes on this particular peg. Moreover, with only three months of the financial year left there is little time for any trading upturn to make its presence felt, suggesting that the full year is unlikely to produce more than £1.75m. pre-tax against £1.6m. Yet a prospective p/e of 12 on earnings of 7.4p a share at 88p can cope with the short-term doubts, while an upturn in the engineering industry could combine with internal factors—boosts are due from re-equipping and the new centralised distribution system—to make 1971-72 a more exciting proposition.

See also Page 17

Fairclough

Leonard Fairclough has been one of the star performers in the contracting and construction sector this year, doubling from its March low ahead of yesterday's interim figures and putting on another 13p to close at 245p after them. The figures are solid. Allowing for the Buchanan acquisition, which took Fairclough into drainage, sewerage and soft construction, it looks as if there is a rise of a fifth or so for the original group in the reported half-time figure of £784,000 against £510,000 previously.

Five months ago, the problem for investors was to balance Fairclough's expansion on its own behalf against a marked slowdown in new contract announcements from the March-April/Fairclough consortium. Since then, however, the Government has been making encouraging noises about motorway and trunk road construction; major contracts picked up by Fairclough include the Gerrards Cross by-pass (in consortium with Amey) and, with March, the near-£16m. job on a section of the M.62—suggesting that the latter consortium, with its distaste for "buying" work, is happier about the margins now available. Given that, and with Buchanan's

specialty looking promising after the recent little Neddy report, Fairclough's solid growth trend can be projected out again. Meanwhile, analysts' estimates vary between £1.1m. and £1.6m. for the year (the former remembering the kind first half weather) producing earnings of about 19.4p in the middle of the range and a p/e of 12.1. Nice to see a share that does not look expensive after the rise Fairclough has had already.

See also Page 17

GUS/Henry

Neither the GUS counter-bid for A and S. Henry nor the identity of the counter-bidder are any surprise. And the price, a little over 76p for a p/e of 18.3 on a three-year earnings average, is no better than Henry could expect on its declining trend. What United Drapery might reflect ruefully upon is the GUS and associates 27 per cent. holding in Henry. U.S. can hardly have believed that it was stepping on such a well cultivated patch.

See also Page 17

Engineering employers see no recovery till next year

BY COLIN JONES

ENGINEERING output is likely to fall to end-1968 levels by the end of this year and, even after the latest Government measures, no general recovery in the demand for capital goods is in prospect until well into 1972 or the earliest, states the Engineering Employers' Federation in the second of its annual economic reports published today.

This could lead to a further decline in employment in the industry, possibly by as much as 85,000 by the end of 1971, which would raise the unemployment rate in engineering to over 4 per cent.

Pay claims

Wage inflation can be at least partly blamed for this deteriorating situation, the engineering employers state in an appeal for moderation in trade union claims for higher pay. "The number of jobs has shrunk, and will continue to shrink, so long as profits are undermined, investment plans cut back, and capital eaten into by inflation," the report states.

"Those who persist in seeking extravagantly high wages, unrelated to the productivity of the workpeople concerned, and to the ability of firms to pay, are carrying out a self-defeating policy," says the employers. "Real wages are undermined by price inflation, and job security

is seriously threatened as businesses are faced with bankruptcy."

The present engineering claim, if conceded in full, would raise costs by 35-40 per cent., the employers estimate: its acceptance at a time when the industry's profitability has already been drastically eroded by cost inflation and low demand would be disastrous.

But it is not enough in the present situation for the Government to urge employers to resist extravagant wage claims, concludes the EEF study. This is because the balance of bargaining power in industry has shifted against employers, a point which is developed in a section dealing with the inadequacy of traditional labour market theories in explaining the present combination of high unemployment and rampant wage inflation.

The EEF report cites several factors which are thought to have contributed to the shift in the balance of bargaining power. On the employers' side, the cost of setting up a claim is held against the cost of taking a

strike but industry may have become less able to afford stoppages partly because of increased integration and capital intensity but also because of the steady attrition of company finances.

Cases are becoming more common, states the EEF report, of companies so close to bankruptcy

that any strike or stoppage has to be avoided.

At the same time, trade unions are more able to prolong industrial action without undue harm to their members because of income-tax rebates and better redundancy and social security payments.

Inequalities

In addition, the trend towards decentralised wage bargaining at plant level has weakened employers' bargaining power. The greater the decentralisation, the easier it becomes to pick off individual companies and to base pay claims upon comparability or inequalities.

The engineering employers conclude from this that the traditional palliative of "stop-go" probably cannot solve the wage inflation problem. "A real improvement will not come about," they continue, "unless and until the Government is prepared to take action to reduce the present bargaining strength of certain advantaged groups."

Unlike the first EEC annual economic report a year ago, today's study does not directly ask for further reflationary moves by the Government. But it questions whether the measures already taken by the Government will lead to as strong a recovery as is generally expected.

BEA may end home first-class service

BY RAY DAFTER

BRITISH European Airways is seriously considering withdrawing its first-class service on domestic routes, the Air Transport Licensing Board was told yesterday.

Mr. James Scarlett, the airline's external affairs manager, said the withdrawal—possibly in the spring—could coincide with certain improvements in standards on the economy services. Carrying first-class passengers on domestic short-haul routes was not an economic proposition, he said.

BEA is one of 10 airlines seeking higher fares. The others are Caledonian-BUA—yesterday renamed British Caledonian Airways—Cambridge Airways, North Atlantic Airlines, Air France, British Islands Airways, British Midland Airways, Dan Air, Channel Airways and Loganair.

BEA is applying for 10 per cent. increases in home routes and 5 per cent. on trunk routes—between London and Glasgow, Belfast and Edinburgh—on November 1, followed by a further 5 per cent. on April 1. Mr. Scarlett, blaming inflation for the application, said higher fares would not halt losses but would reduce them to a less

burdensome level. Without increases losses before interest in 1971-72 on domestic routes would be £2.75m. By 1972-73 this loss could be £5.5m.

BEA's domestic fares were still low by international standards and low compared with domestic air fares in other countries, Mr. Scarlett went on.

He compared BEA's London-Glasgow fare of £11 with fares for similar distances on the Continent: Hamburg-Stuttgart, £18.40; Paris-Toulouse, £16.55; Malmö-Stockholm, £13.50.

Mr. David Davies, managing

director of Cambrian, said his airline and Northeast (both members of British Air Services) were applying for rises of about 10 per cent. on domestic services.

Mr. Charles Powell, for British Caledonian, asked for a 10 per cent. increase on the airline's Jersey route and 5 per cent. on trunk routes and the Glasgow-Southampton route on November 1 and a further 5 per cent. on trunk routes and the Glasgow-Southampton route on April 1.

The hearing continues to-day.

Pilots want noon reply

THE BRITISH Airline Pilots Association executive last night gave British European Airways until noon to-day to respond to its 1,400 pilots before deciding on a future course of action. On Tuesday, a referendum among BEA pilots gave the BALPA executive a mandate for a work-to-rule campaign.

A BALPA spokesman, Mr. Gordon Hurley, said last night: "Talks broke down last Thursday when BEA imposed three totally unacceptable conditions

on further negotiations. We have made every attempt to get talking again.

"At the Corporation's request, we attended an informal meeting during the Bank Holiday, and yesterday the executive sent by hand proposals that we feel will allow negotiations to re-start. We have had no reply as yet, but the urgency of the situation, and to-night advised the airline that we can defer a decision regarding industrial action no later than noon."

The hearing continues to-day.

Turriff sues City Corporation

BY NICHOLAS LESLIE

TURRIF Construction Corporation has served a writ on the City of Edinburgh claiming damages in respect of sums due on a contract for Phase Two of the Barbican scheme signed in 1964. Turriff announced last week that it was withdrawing from the Barbican project because, it claimed, the City Corporation had repudiated the contract.

Subsequently the City Corporation counter-claimed that it was withdrawing from the contract, and said that proceedings had been started against Turriff for damages over its withdrawal from the Barbican.

More than £5.33m.

An appearance has already been entered on Turriff's behalf. The writ does not specify the amount which is being claimed for damages, but Mr. E. J. Elzm, Turriff's director of Turriff,

said yesterday that it would probably be more than the £5.33m. claimed in a writ issued by Turriff in March but which was not subsequently served.

The latest writ names Turriff Construction, Ltd., as the first plaintiff and Turriff Construction Corporation, the holding company of TCL, as the second plaintiff.

TCL claims sums due on the 1964 contract, damages for repudiation of the contract by the City Corporation and also interest. In addition, TCL claims it should be indemnified by the City Corporation for claims by, or liability to, sub-contractors under sub-contracts entered into by them pursuant to the main contract.

The claim by the second plaintiff relates to an agreement dated May, 1969, whereby the City Corporation advanced £12m. to Turriff Construction Corporation to be repaid on com-

pletion of the contract unless Turriff gave notice of arbitration. It is in practice a declaration that, by reason of the City's repudiation of the main contract, Turriff is released from any liability actual or potential under a letter of guarantee dated May 5, 1969, and an agreement dated July 6, 1971.

Phased withdrawal Turriff withdrew from the Barbican—where its original contract in 1963 was worth £8m.—after it asked the City Corporation for work to proceed on a basis whereby payment was made on each section as it was completed. After three weeks Turriff had not received a reply from the City, and it subsequently announced it would stage a phased withdrawal consequent on repudiation of the contract by the City. Lack of a positive answer was seen by Turriff as a repudiation of the contract.

R-R (1971) has turned corner—Lord Cole

Financial Times Reporter

LORD COLE, chairman of Rolls-Royce (1971), said in a message to employees of the Derby engine division yesterday that the company had "turned the corner" in the development of the RB-211 engine.

The message, placed on the TriStar notice board, said that two 150-hour engine tests had been completed and the results had been most encouraging. More tests were required before the engine could obtain a certificate of airworthiness but, he went on, "the corner is turned and I would like to congratulate all concerned."

Lord Cole's remarks indicate he is satisfied the company is well on the way to providing the engine specified by airline customers of the Lockheed TriStar. He added: "The hard work and sustained effort made by all sides is beginning to have its effect. The country and airline have in the RB-211 engine."

Payments surplus cut for 1970

By William Keegan

THE 1970 U.K. balance of payments surplus on current account has been revised downwards by £42m.

New figures published in the Central Statistical Office's annual Pink Book ("United Kingdom Balance of Payments 1971") show a current surplus for 1970 of £579m., against the £621m. previously estimated. The figure for total current inflow is the same at £1,087m.

Further information on investment and capital flows has brought a new estimate of £115m. for this category in 1970, against the £536m. originally published. And the balancing item has been revised downwards from £130m. to £93m.

It also turns out that previous estimates of the outflow from the U.K. in the form of export credit were much too high. When allowance is made for advance payments by overseas customers through U.K. banks, the 1970 outflow comes down from £302m.—original estimate—to £234m.

LOB aids 1,000th move

THE 1,000th company to move with the help of the Location of Offices Bureau has recently completed the first stage of its move into new head office premises in Stevenage.

Friden, the Singer Organisation's business equipment division, will have decentralised 180 jobs when the second stage of the move is completed.

Since it was established in 1963, the Bureau has helped in moving 10,000 jobs out of the central area, with a further 18,000 job moves already planned.

to transferees when all necessary conditions have been satisfied to give the transferee as between himself and the company the right to have the transfer registered.

More UCS men redundant

BY ANDREW HARGRAVE, SCOTTISH CORRESPONDENT

MR. ROBERT C. Smith, the liquidator, announced a further 327 redundancies at Upper Clyde Shipbuilders to-day as the inquiry into the social and economic consequences of its collapse began here.

This brings the total declared redundant in the past three weeks to 728; and to underline the sombre background to this inquiry—sponsored by the Scottish TUC, half the dismissals (which take effect on Friday) will be from the Clydebank yard, which contains the now well-known phrase of cutting Upper Clyde by putting in a Government "butter".

A further 700-or-so redundancies are expected to be announced before the end of this month.

This afternoon, Mr. Alex Ferry, district secretary of the Amalgamated Union of Engineering Workers, reminded the inquiry team, headed by Professor Raymond Ilseley, that the UCS tragedy was only part of the problem affecting the Greater Glasgow area of which Clydebank is part.

In 20 months since the beginning of last year, he estimated a loss of 10,000 jobs—3,500 in engineering, 3,500 in UCS (including about 1,000 in Clydebank) and a further 3,000 in other local industries.

Against this, he could recall only two new enterprises (both in Glasgow) representing job prospects of between 800 and 1,000 altogether.

Only this morning, he had learned that the North British Engine works in Scotland, near the doomed UCS yard, which had provided steady employment over the years, would shed 400 workers by the end of this year.

In Clydebank, where, according to Provost Robert Fleming, 7,643 jobs had been lost in the period 1964-70, mass unemployment was already with one in eight compared with the high Glasgow average of 10.6 per cent.

Rates pressure

This created a pressure on the rates (rates rebates increased by 50 per cent. in a year in 1970-71) and rents, which in turn was expected to lead to an increase in rates and reduced the attraction of the town to new industry.

In answer to questions, Mr. Ferry recognised that unemployment would have an adverse effect on both industrial relations and the workers' attitudes towards productivity.

There were also clear signs of rising emigration. Mr. Ferry spoke of a "considerable number of inquiries" at his office during the past six to nine months relating to jobs in Germany and the Netherlands.

This, he said, was underlined by the fact that in Clydebank, emigration figures had risen from 130 in 1965 and 1966 to between 500 and 600 in 1969 and 1970.

Early in 1971, Mr. James Reid had given a somewhat politically charged evidence on behalf of the UCS shop stewards.

New procedure on bargains at liquidation

FINANCIAL TIMES REPORTER

AS A RESULT of the problems which arose on the London Stock Exchange following the Rolls-Royce failure, the Council of the Stock Exchange has now laid down a procedure by which bargains can be settled after a Receiver has been appointed to a company and has closed the company's share register.

The Council has been advised that, although a register may be closed because of lack of funds, the obligation of a company to register transfers continues—even though in practice registrations may not be effected.

Furthermore, the equivalent of a legal title passes from transferee

CLYDEBANK, Sept. 1.

He concentrated on the claim repeatedly heard from the shop stewards that UCS had been on the road to viability, and that its demise was a deliberate political act engineered by the Government.

To support this, he distributed copies of the memorandum prepared to have been prepared by Mr. Nicholas Ridley, now Parliamentary Under-Secretary at the Department for Trade and Industry, before the election, which contains the now well-known phrase of cutting Upper Clyde by putting in a Government "butter".

Mr. Reid, too, cited figures of unemployment and reduction of labour in the industry. There were, he said, 720 unemployed shipyard workers registered in Glasgow alone, and the Govan yard, the former Fairfields, shed about a third of its skilled labour force, nearly 900 men, in the last 18 months.

The inquiry continues to-morrow.

£7m. order

James MacDonald writes: Scott Lithgow, the lower-Clyde shipbuilding group, has received an order worth about £7m. from Sugar Line—part of the Tate and Lyle group—for two 28,000 deadweight ton bulk carriers.

The ships, which will be built at the Cartside yard in Greenock, will be delivered in 1973 and 1974. Mr. A. Ross Belch, managing director, said yesterday the contract raised the group's order book to 33 ships, valued at about £110m.

Commenting on the lower-Clyde yards' need for more shipyard workers, Mr. Belch said that applications had come from a number of areas in Scotland, including some, of course, from Upper Clyde Shipbuilders.

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Appleyard

Weather

U.K. TO-DAY

Scotland, N. Ireland: M. cloudy with rain. E. rain. Shower weather spreading. N. England, N. Wales: C. with some rain. Bright into S. Wales, S.W. England: C. with drizzle. Hill and coast S.E. Cent. England, Mid. E. Anglia: Mainly dry with 1 or sunny spells. Temps. as below normal.

London, S.E. Cent. England Anglia, Midlands, Channel: Mainly dry. Bright or spells. Wind S.W. moderate, locally Max. (68°F).

S.W. England, S. Wales: Cloud